Government of Canada
Minister of State for Youth

Gouvernement du Canada
Ministre d'État à la Jeunesse

JOB FUTURES

AN OCCUPATIONAL OUTLOOK TO 1995

the Handbook

Canadian Occupational
Projection System
COPS

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Jean J. Charest
Minister of State for Youth

Minister of State
Youth

CANADA

Ministre d'État
Jeunesse

What career should you choose? Young people today need the most recent and comprehensive information available to help them make informed decisions about their future. The federal government, through Employment and Immigration Canada and the Ministry of State for Youth, is constantly evaluating employment opportunities for hundreds of occupations.

In *Job Futures: the Handbook*, you will find in-depth information on the present and future employment prospects for a host of occupations as well as on the labour market experience of recent graduates from several fields of study. The handbook provides you with a quick and easy-to-use condensed version of *Job Futures, Volumes I & II*. These two volumes are available at your local and university libraries or by submitting the order form included in the handbook.

I am committed to helping young Canadians choose interesting and financially-rewarding careers. I want the transition from school to the workplace to be as smooth as possible, and I know you will find *Job Futures: the Handbook* a great help as a first step in researching the information you need to make these very important career decisions.

Jean J. Charest
Minister of State for Youth

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Introduction

When you come to the big step between school and career, there are a lot of decisions to be made, a lot of elements to be considered. The purpose of *Job Futures: the Handbook* is to encourage you to think about your career and study options, and to give you some facts based on what is actually happening in the school system and in the job market. At a glance, you can see in this guide the wide variety of study areas available and the occupations to which these educational choices may lead. The short descriptions of courses and jobs will help you understand the connections between the world of school and the world of work. As well, the probable labour market conditions outlined for each occupational grouping may encourage you to stay at school to prepare yourself better for the career you choose.

Job Futures is a product of the Canadian Occupational Projection System (COPS), a labour supply and demand information and data bank designed by Employment and Immigration Canada. This handbook is an abbreviated version of the larger, more comprehensive publication, *Job Futures: An Occupational Outlook to 1995, Volume I: Experience of Recent Graduates* and *Volume II: Occupational Outlooks*. Volume I concentrates on the link between the educational system and the labour market through an analysis of the experiences of recent graduates from some 180 fields of study at the postsecondary level. Volume II describes the current and future job market situation for specific occupations. After reading through this handbook, you should check the more comprehensive document for more detailed information (see below).

The information on fields of study is based mainly on the 1984 National Graduate Survey, conducted by Statistics Canada. It should help you decide what type of education you need in order to find a job in your chosen occupation. The fields of study are grouped by broad academic subject area (humanities, social sciences etc.,) and then by type of institution (university, trade school or other public institution and community college). The handbook identifies the main occupations entered by graduates within two years of graduating from each of the fields of study listed. Also included are summaries of the graduates' impressions of their fields of study.

The graphs display the labour market experience of graduates two years after graduation. For community college and trade/vocational graduates, their employment status is displayed in pie charts. For university graduates, the occupational destination is displayed in bar charts. The occupations listed here reflect only some of the possible outcomes and not necessarily all, nor even the most desirable, ones. They are reflective of the 1982-1984 job market. An alphabetically ordered list of fields of study is included in the index, page 315.

The information on occupations in the handbook is taken from Volume II of the main publication, *Job Futures*, organized according to the Standard Occupational Classification. These descriptions include a sample list of typical occupations in the category and a brief analysis of current and projected market conditions, including employment growth projections and replacement openings. This information was reached after consultation with experts in the field. If changing technology has a significant impact on jobs in a particular area, it is noted. A map displays the geographic distribution of employment across the country. The occupations are listed alphabetically in the index on page 321.

Meaning of Some Terms Used in this Handbook

Graduates are full-time and part-time students in their graduating year.

Graduates employed full-time/part-time are graduates employed full-time/part-time two years after graduating. The figures in the Handbook may differ from those in the main *Job Futures* publication since the handbook combines all university levels for each field of study.

Unemployed graduates are graduates who were in the labour force but not employed two years after graduation. The figures in the Handbook may differ from those in the main *Job Futures* publication since the handbook combines all university levels for each field of study.

Occupational distribution of graduates reflects the distribution of full-time employed graduates two years after graduation.

New job openings are job openings that are expected as a result of growth in the economy.

Replacement openings are those expected as a result of withdrawals from the labour force because of death, retirement, returns to the household and returns to school. They do not include openings created by people moving from one occupational group into another.

Geographic distribution of employment is taken from the 1981 Census. It represents the employment distribution of the occupation, but not necessarily the distribution of anticipated job openings.

Average employment growth indicates an average growth of 1.3 per cent per year to 1995. Growth expectations ranging from 1.1 per cent to 1.5 per cent are considered "about average."

Sensitive to business conditions or cycles describes occupations that can be among the quickest to decline during recessions but the first to rebound during a recovery.

A fuller description of the terms and concepts used in the handbook *Job Futures* may be found in volumes I and II of the main publication.

What *Job Futures* Can't Do

Job Futures: the Handbook should not be treated as stand-alone career information. Although it provides a reasonable view of what you might expect in various occupations, such as availability of work, rate of unemployment and general attitudes of graduates working in the area, it does not provide the complete picture. To find out more about training requirements, full job descriptions or working conditions, consult your nearest Canada Employment Centre, or refer to the *Canadian Classification and Dictionary of Occupations (CCDO)*; *Occupational Qualifications Requirements*, (Information Canada); or the *Directory of Associations in Canada*, 5th edition (Brian Land, ed.). As well, Employment and Immigration Canada offers CHOICES, an interactive computer system that allows students to ask pertinent questions about careers. For further information, contact a Canada Employment Centre or the Employment Support Services Branch, Employment and Immigration Canada, National Headquarters, Ottawa-Hull.

Projections presented in *Job Futures: the Handbook* are to be interpreted with caution since no one can say with certainty what the future has in store. These projections are not predictions of what will necessarily happen; rather, they represent one possible path for the future.

Finally, as this handbook only represents a reduced version of the more complete *Job Futures* publication, an order form is enclosed for those who would like to obtain the more comprehensive publication. The complete edition of *Job Futures* may also be available for consultation from your guidance counsellor, school library or public library.

Fields of study

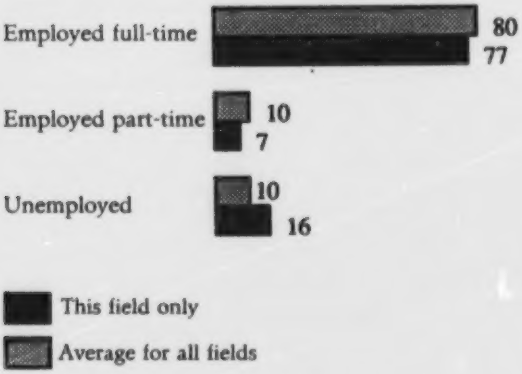
Applied Arts

University

- Undergraduate (3 years)

The 1982 applied arts graduates continued their schooling more than other undergraduates, perhaps because they had a harder time finding jobs than graduates in other fields. They were working mostly in teaching, especially as assistants to university faculty members. These graduates compete for jobs with other college graduates from creative and design arts, graphic and audio-visual arts and fine arts and from university graduates in this field at the master's and doctorate levels.

Destination of Graduates (%)

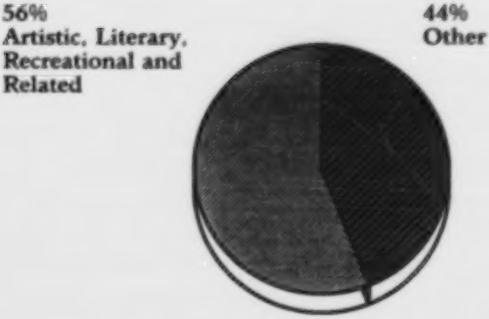


Commercial and Promotional Arts

Trade Schools (9 months)

Even though a lower-than-average proportion of trade school graduates looked for jobs at the end of their studies, they had a better chance at finding both part-time and full-time jobs than other graduates. More than half who were working full-time two years after graduation were in artistic and literary occupations, mainly employed as advertising and illustrating artists. These graduates appeared to be satisfied with their jobs and most would choose the same course if they had to make the decision again.

Full-time Occupation of Graduates

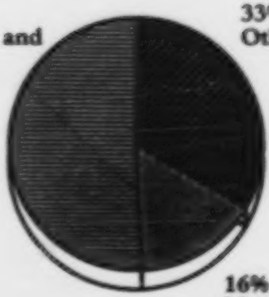


Commercial and Promotional Arts

Community College (2 years)

Fewer graduates from this course of study continued their schooling, and a greater number were much more successful at finding jobs than were other community college graduates. Two years after graduation more than half were working as advertising and illustrating artists in business, printing and publishing. Some were in management occupations. Generally, commercial and promotional arts graduates who were working full-time were satisfied with their jobs, and most would choose the same course if they had to make the decision again.

Full-time Occupation of Graduates

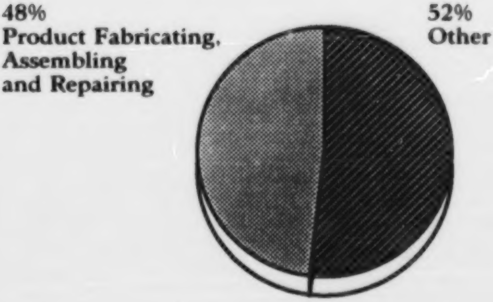


Creative and Design Arts

Trade Schools (6 months)

Job prospects for these trade school graduates were poor, and a significantly lower-than-average proportion found full-time work. About half of those who did were working in product fabricating, assembling and repairing occupations, especially as sewing machine operators. Even though these graduates did not have a particularly easy time finding jobs, an average proportion of them would choose the same course again.

Full-time Occupation of Graduates

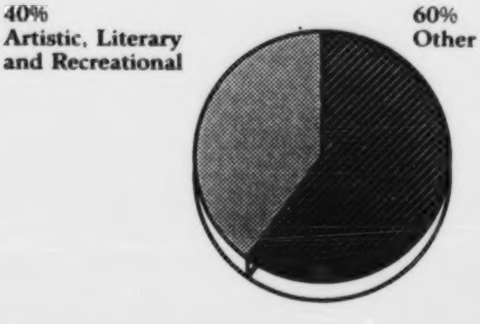


Creative and Design Arts

Community College (3 years)

Fewer graduates from this field entered the labour force after graduation than from other fields of study, perhaps because of the slightly higher-than-average unemployment rate they faced. As well, the proportion of graduates who were employed full-time was less than the average across all fields of study. According to 1984 data, creative and design arts graduates found work mostly as designers. Only about 60% said they would choose the same course if they had to start again.

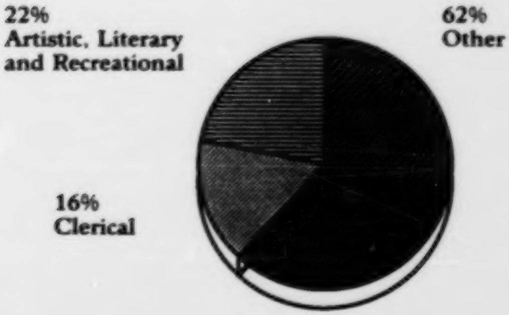
Full-time Occupation of Graduates



Fine Arts
Community College (2 years)

Fewer fine arts graduates were able to find full-time jobs after graduation than those in other college fields of study. Close to 50% continued their education after graduation, a proportion almost five times that of other college fields of study. Those who were working full-time two years after graduation were mostly in the artistic, literary, recreational and clerical fields. Even though, in general, fine arts graduates were dissatisfied with their experiences in the job market, 75% said they would take the same course again.

Full-time Occupation of Graduates

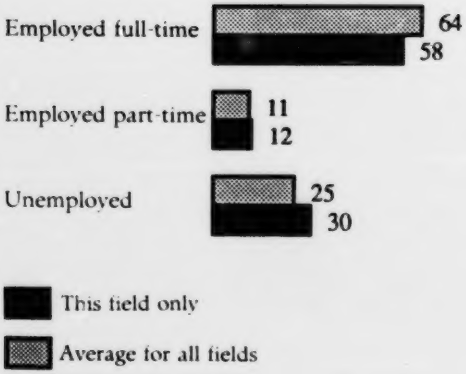


Graphic and Audio-Visual Arts

Trade Schools (12 months)

Most graduates in this field of study looked for jobs when they finished their program, but a greater-than-average proportion either could not find work in their own field or could only find part-time employment. Although these graduates tended to find jobs unrelated to their training, a higher-than-average number said they would select the same program of study if they had to make the decision again.

Destination of Graduates (%)

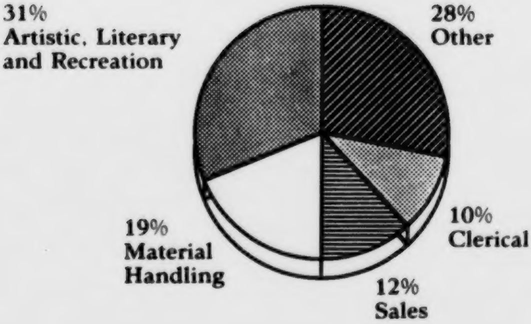


Graphic and Audio-Visual Arts

Community College (2 years)

An average proportion of graduates in this field entered the labour force upon graduation; less than the average found work. Graduates who were employed full-time two years after graduation were mostly advertising and illustrating artists in the commercial printing and advertising services industry. The remaining were concentrated in material handling, sales and clerical occupations. About 65% of these graduates would make the same educational choice if they had to choose again.

Full-time Occupation of Graduates



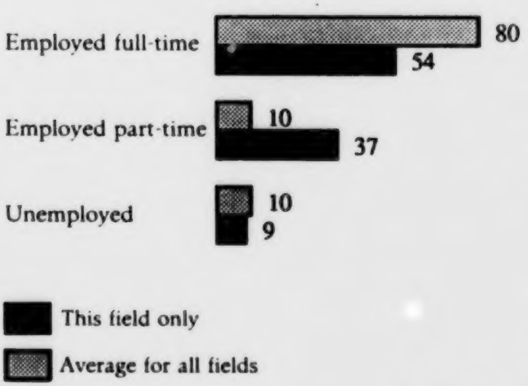
Music

University

- Undergraduate (4 years)
- Master's (2 years)

Two years after graduation, two-thirds of the undergraduate degree holders in music were in the labour force. Although they were not too successful in finding full-time employment, they had better luck finding part-time work. A 1984 survey indicated that a significant proportion of 1982 graduates working full-time were in teaching occupations. Of the master's graduates in this field, 10% continued their education, and 10% did not look for jobs at all. Approximately 25% of those graduates who did enter the labour force could not find jobs, and only 50% could find full-time employment. Of those 50%, the majority were working as musicians and singers two years after graduation.

Destination of Graduates (%)

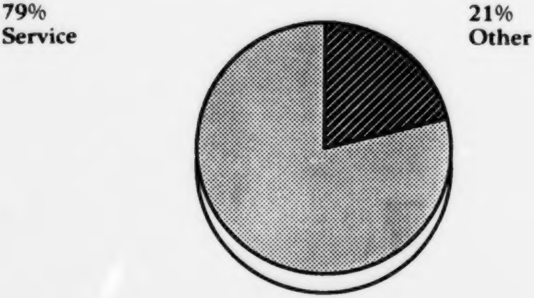


Personal Arts

Trade Schools (10 months)

Graduates of this program were slightly more successful in finding jobs than graduates from other fields. The majority of those who were working full-time two years after graduation were employed in service occupations, mostly as barbers and hairdressers. Perhaps partly because a higher-than-average proportion of these graduates were self-employed, the majority felt that their current job matched their training, and about 75% of these graduates would make the same educational choice if they had to decide again.

Full-time Occupation of Graduates



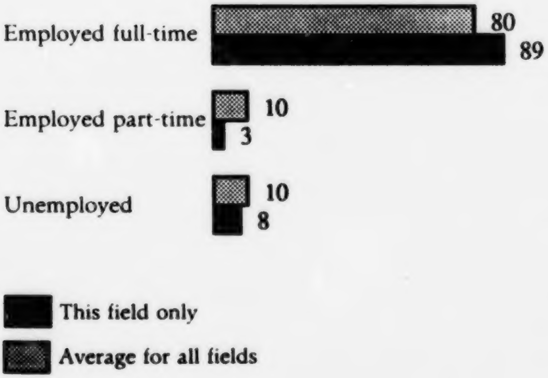
Commerce (Business Administration)

University

- Undergraduate (3 years)
- Master's (2 years)
- Doctorate (3 years)

Graduates of this undergraduate program were very successful in finding full-time employment, mainly as accountants, auditors and other financial officers. Significant numbers were also working in the clerical and sales occupations. Almost all master's graduates of the business administration program entered the labour force, and most found full-time employment as accountants, auditors and other financial officers in the banking or accounting and bookkeeping industries. All doctorate graduates looked for work after obtaining their degree, and all found full-time employment, 90% of them as university teachers. These results surpass all other fields.

Destination of Graduates (%)

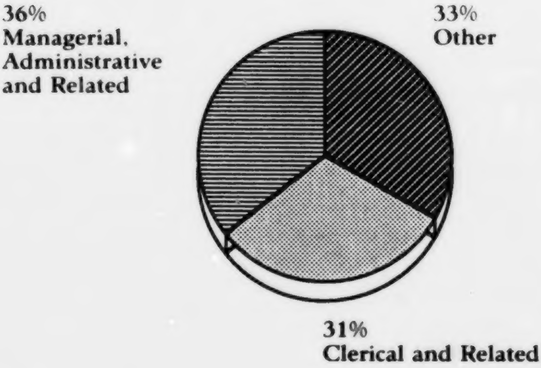


Financial Management (Accounting)

Trade Schools (12 months)

Although a smaller proportion of graduates in accounting at this level entered the labour force than graduates from other fields, those who did were quite successful at finding work, largely the result of the availability of part-time jobs. Of those working, the majority were employed as accountants and other financial officers. According to 1984 data, almost all of those employed full-time were satisfied with their current job and would make the same educational choice if they had to make that decision again.

Full-time Occupation of Graduates

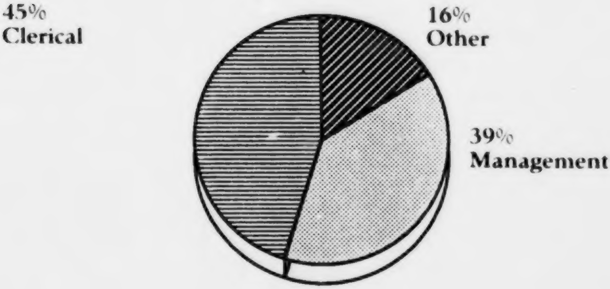


Accounting

Community College (2 years)

Although more accounting graduates entered the labour force than other college graduates, they had a slightly higher unemployment rate. The proportion who found full-time work was less than average, and of those who did not enter the labour force, a slightly less-than-average number continued their education. Most found jobs as bookkeepers or financial officers in the accounting and bookkeeping services industry.

Full-time Occupation of Graduates

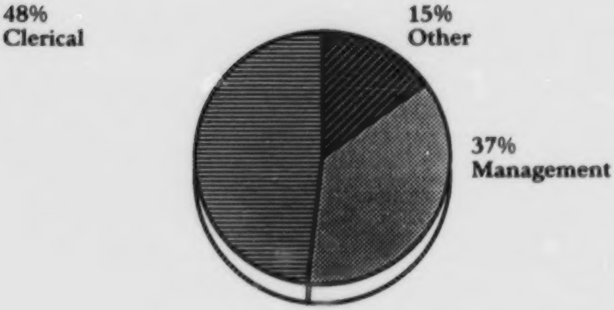


Other Financial Management

Community College (3 years)

A significantly smaller proportion of these graduates entered the labour force than from other fields. Not only was the unemployment rate slightly higher than average for this group, but fewer than the average found full-time jobs. Most of those who did not look or find a job continued their education. Two years after graduation, employed graduates were mostly financial officers (accountants or auditors), bookkeepers or tellers. Even though financial management graduates were slightly dissatisfied with their experiences in the labour market, a slightly greater-than-average proportion said they would select the same course again.

Full-time Occupation of Graduates

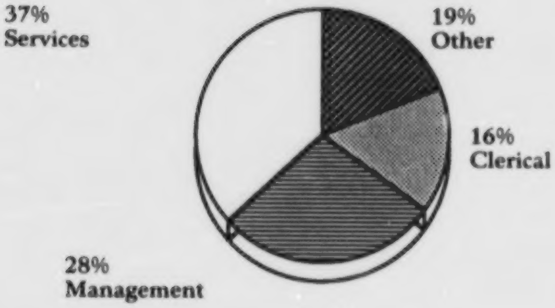


Institutional Management

Community College (2 years)

More of these graduates entered the labour force than those from other fields of study. Not only was their unemployment rate lower, but the proportion who found full-time jobs was slightly higher than average. About 10% of those who did not enter the labour force continued their education. Those working full-time two years after graduation were employed mostly as service managers, chefs, cooks, bartenders or waiters in the tourism industry. Although these graduates seemed to be satisfied with their success in the labour market, 60% still thought they were over-qualified for their jobs, and a less-than-average proportion would choose the same course again.

Full-time Occupation of Graduates

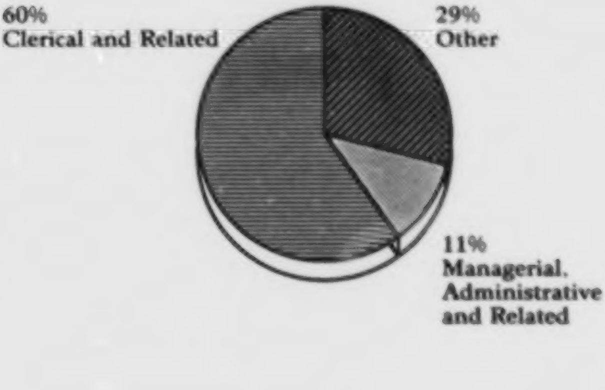


Management and Administration (Business and Commerce)

Trade Schools (14 months)

An average proportion of these graduates entered the labour force, but less than average numbers were able to find work. Of those who had full-time jobs two years after graduation, the majority were working as secretaries and stenographers. These graduates were much more likely than graduates from other fields at this level to have jobs related to their course of study, and more said they would make the same educational choice again.

Full-time Occupation of Graduates

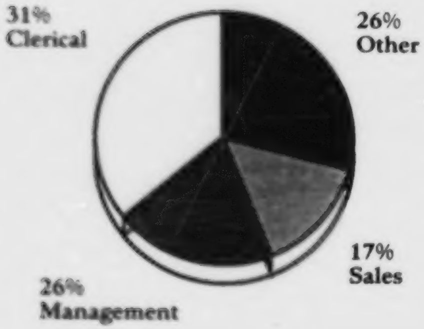


Management and Administration (Business and Commerce)

Community College (2 years)

Graduates in this field are truly representative of the average for all community college graduates: 80% directly entered the labour force, and the majority (90%) found employment. Those working full-time two years after graduation were mostly sales managers, bookkeepers, financial officers, commercial travellers, commodity salespersons or secretaries. Despite the apparent ease with which these graduates found work, fewer than average were satisfied with their job. The majority felt over-qualified, and only about half the graduates, compared with 65% of other college graduates, would make the same educational choice again.

Full-time Occupation of Graduates

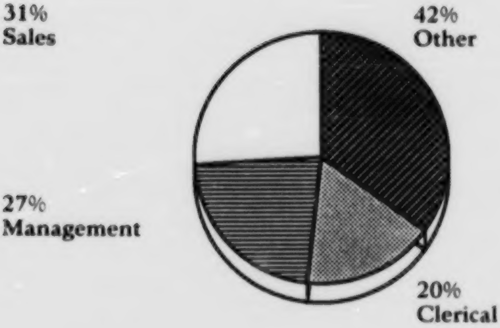


Marketing

Community College (2 years)

A smaller proportion of marketing graduates entered the labour force than from other fields, although they fared as well as other community college graduates in finding jobs (10% unemployment rate). About 10% of those who did not enter the labour force continued their education. Those working full-time two years after graduation were mostly sales clerks; some were working as sales and advertising managers and in clerical occupations. Less than the average proportion of marketing graduates were satisfied with their job, and many thought they were over-qualified. Only about 55% of them would select the same course again.

Full-time Occupation of Graduates

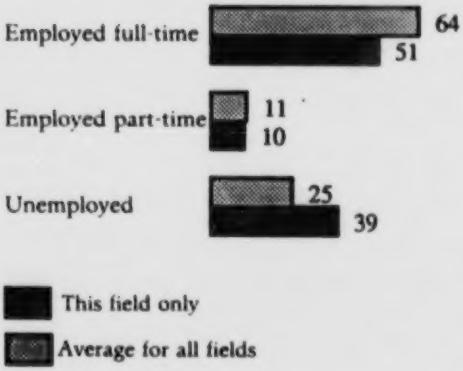


Retail Sales

Trade Schools (6 months)

An average number of retail sales graduates entered the labour force and slightly more than half found jobs (40% unemployed). They were less positive about their jobs than graduates in other fields and less likely to choose the same course again if they had to. Community college graduates in this field had better luck in the labour market.

Destination of Graduates (%)

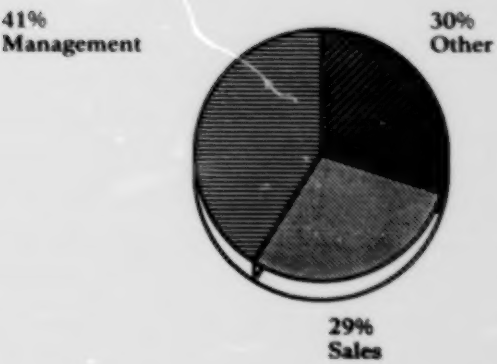


Retail Sales

Community College (2 years)

More retail sales graduates than other college graduates entered the labour force. Not only was their unemployment rate lower than average, but the proportion who found full-time jobs was much higher. Those working full-time two years after graduation were mostly sales and advertising managers. Even though these graduates were generally successful in finding work, many were dissatisfied with their currrent job. About 70% thought their job was related to their field of study, but felt over-qualified for it.

Full-time Occupation of Graduates

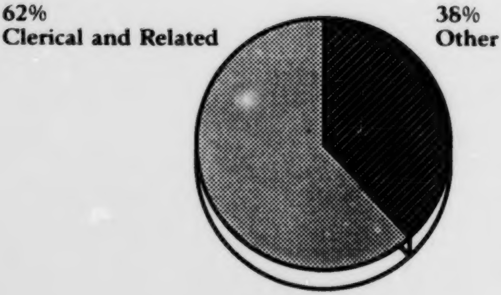


Secretary - Accounting and Bookkeeping

Trade Schools (9 months)

Most graduates from this field entered the labour force and had average success for this level in finding work (26% unemployed). Those working full-time were employed mostly in clerical and related occupations, especially as bookkeepers and accounting clerks.

Full-time Occupation of Graduates

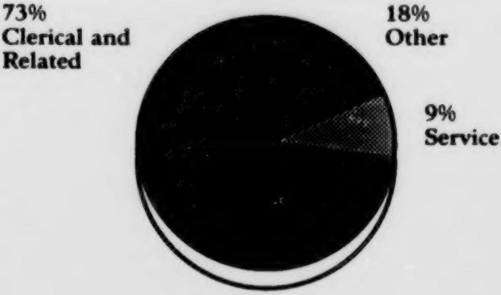


Secretary - General

Trade Schools (9 months)

Although an average proportion of graduates from this field entered the labour force, their unemployment rate was higher than average. Those who did find full-time jobs worked mainly as secretaries and stenographers. Employed graduates from this field of study were generally satisfied with their job, and a more-than-average proportion said they would choose the same course again.

Full-time Occupation of Graduates

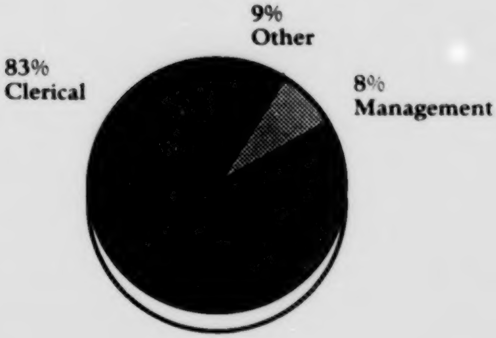


Secretary - General

Community College (2 years)

The early labour market experience of graduates in this field was about average except that a much higher proportion found full-time work. Of those who did not look for or find jobs, a slightly greater-than-average proportion continued their studies. Graduates were employed mostly as secretaries, word-processing operators, bookkeepers and receptionists in the business service, banking and insurance industry. Others found managerial jobs such as executive secretaries. In general, these graduates were more satisfied with their success in the labour market than other community college graduates, but still only about 60% stated they would select the same course if they had to make the choice again.

Full-time Occupation of Graduates

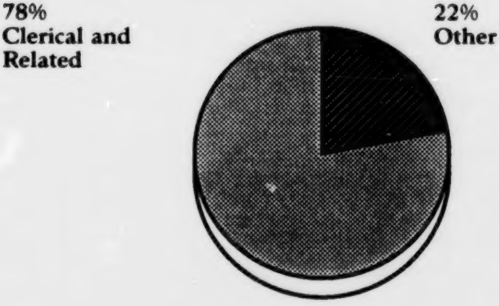


Secretary - Legal

Trade Schools (10 months)

A smaller-than-usual proportion of graduates from this field entered the labour force, but those who looked for a job were more successful than other trade-level graduates. They found work mainly in clerical and related occupations, especially as stenographers and secretaries (including legal secretaries). Employed graduates from this field of study were more positive than other graduates about their early experiences in the labour market, but about half felt they were over-qualified for their job.

Full-time Occupation of Graduates

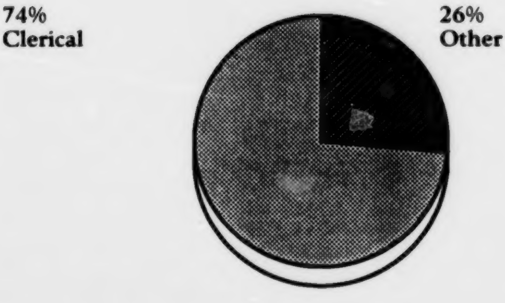


Secretary - Legal

Community College (2 years)

Legal secretary graduates were more successful in the labour market than the average for other college fields of study. Not only did a larger proportion enter the labour force, but there were more who found full-time employment. A lower-than-average number of graduates continued their education after graduation. Two years after graduation, these graduates were employed mostly as secretaries and stenographers in lawyers' and notaries' offices. Not only were they more successful than other college graduates in their transition from school to work, but a greater-than-average proportion were satisfied with their present job. However, only about 55% said they would choose the same course again.

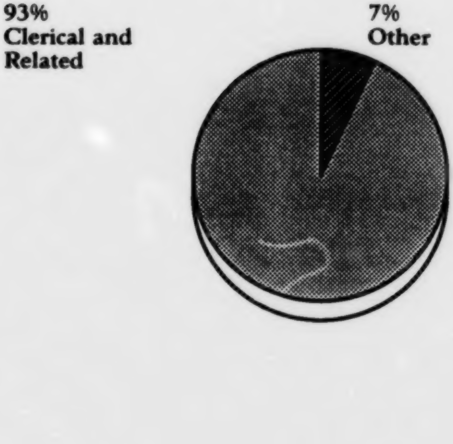
Full-time Occupation of Graduates



Secretary - Medical
Trade Schools (10 months)

A lower-than-average proportion of graduates looked for jobs upon completion of their program, facing about average labour market conditions for this level. Almost all employed graduates were working in clerical and related occupations, more than half as secretaries and stenographers (including medical secretaries). These graduates were the most likely of all secretarial graduates to find jobs matching their program of study. Comparably fewer felt overqualified, and about 70% said they would choose the same course again. College graduates in this field of study fared relatively better in the labour market.

Full-time Occupation of Graduates

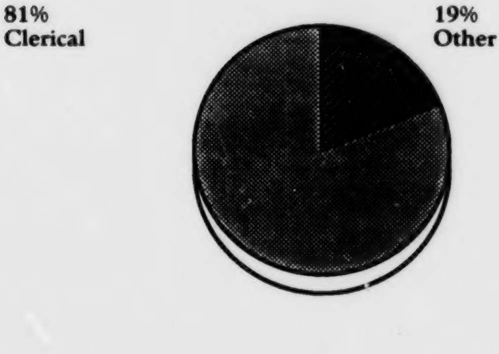


Secretary - Medical

Community College (2 years)

Following graduation, almost all medical secretaries entered the labour force. Not only was their unemployment rate slightly lower than the average for all college graduates, but the proportion of those who found full-time work was significantly higher. No students took this course on a part-time basis or continued their education after graduation. They mostly found jobs as secretaries and stenographers in the hospital industry. Although medical secretaries appear less successful than legal secretaries in finding jobs, their success rate is still better than for general secretaries and most other college graduates. A significantly greater-than-average proportion liked their present job and did not feel overqualified.

Full-time Occupation of Graduates

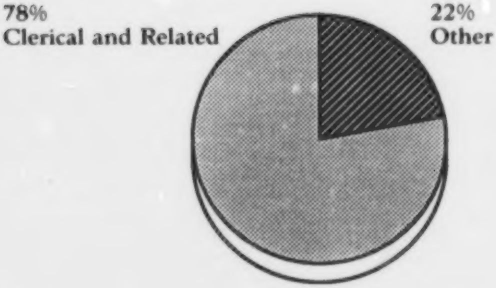


Secretary - Word Processing

Trade Schools (4 months)

About an average proportion of graduates from this program entered the labour force. Their unemployment rate was low – 14% compared with 25% for trade-level courses overall. The majority were employed in clerical and related occupations, although not in any specific one. Although these graduates were more likely than other trade/vocational graduates to find employment, only about 50% thought their job corresponded to their course of study.

Full-time Occupation of Graduates



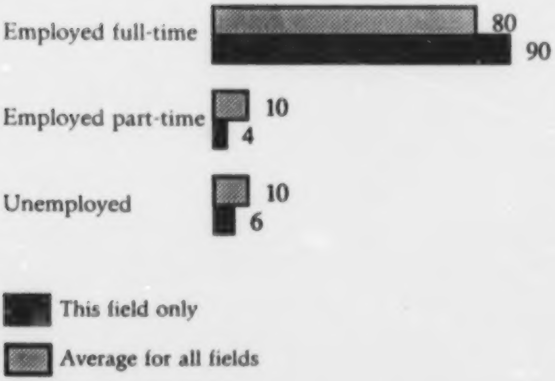
Specialized Administration

University

- Undergraduate (3 years)
- Master's (2 years)

Only 5% of 1982 undergraduates were unemployed two years after graduation. An average proportion of master's graduates entered the labour force and found full-time work. They appear to have a higher unemployment rate because virtually none found part-time jobs. Almost half the bachelor's graduates were working in management and administration, while another significant number were employed in sales occupations. Master's graduates were employed mostly as accountants and auditors or administrators in government hospitals. Bachelor's graduates were more satisfied than average with their jobs; most master's graduates, although less than satisfied with their jobs, stated they would take the same course again, perhaps because they were earning about $5,000 more a year than other master's graduates.

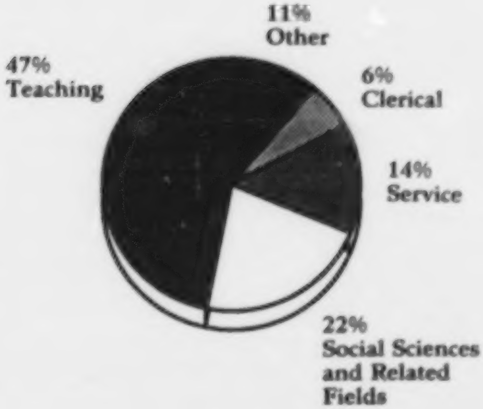
Destination of Graduates (%)



Education and Counselling
Community College (2 years)

About 83% of these graduates entered the labour force upon graduation and 92% found full-time work. Education and counselling graduates were employed mostly as elementary teachers, kindergarten teachers and teachers of exceptional students, or as babysitters in day-care centres, nursery schools and child welfare services. In view of the high proportion of graduates who found jobs, it is not surprising that 89% thought their current job matched their field of study, and only 23% believed they were over-qualified. Satisfaction with the course is reflected by the fact that almost 70% stated they would select the same course of study again.

Full-time Occupation of Graduates



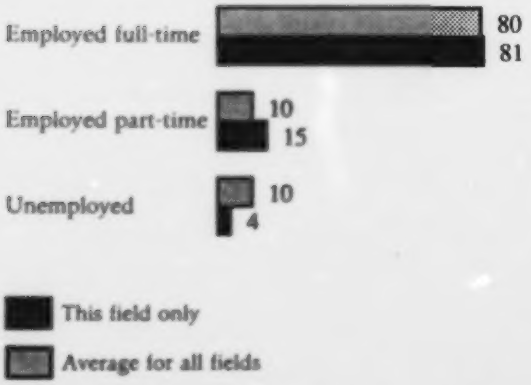
Education, Non-Teaching

University

- Undergraduate (3 years)
- Master's (2 years)
- Doctorate (4 years)

Taking into consideration the high proportion of part-time students, 97% of bachelor's graduates from this field entered the labour force, according to 1984 data. Although most found full-time work, they were more likely than other graduates to be employed on a part-time basis. Only 35% of master's graduates entered the labour force but they had a much better-than-average success rate, with only 3% unemployment. Almost all doctorate graduates entered the labour force, with only 1% unemployment. Bachelor's graduates from this field of study were employed for the most part in the teaching field, especially at the elementary and secondary school levels. Master's graduates were employed mostly as elementary and kindergarden teachers, education administrators or counsellors. Doctorate graduates mainly became university teachers or found administrative jobs in the teaching field and in psychology.

Destination of Graduates (%)



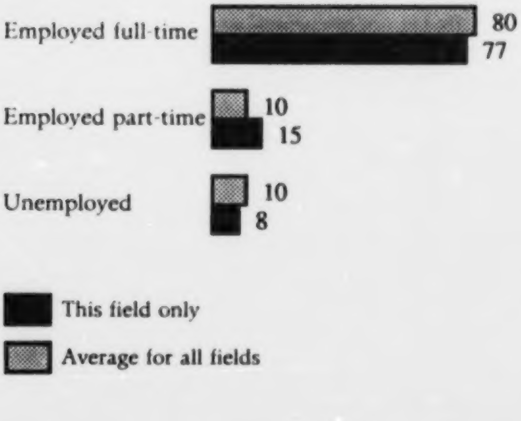
Elementary/Secondary Teacher Training

University

- Undergraduate (3 years)
- Master's (2 years)
- Doctorate (4 years)

According to 1984 data, a much greater proportion than average of bachelor's graduates were enrolled on a part-time basis during their final semester, and a lower-than-average proportion continued their studies after graduation. Of those graduates in the labour force, 75% had found full-time teaching jobs at the elementary and secondary school level, two years after graduation. Only 35% of master's graduates looked for or found jobs, and of these only 4% were unemployed. Almost all doctorate graduates who wanted work, found it. About 75% of the bachelor's graduates, compared with 70% of all undergraduates, said they would make the same educational choice if they had to make that decision again. Of the master's and doctorate graduates, 80% would choose the same course again.

Destination of Graduates (%)



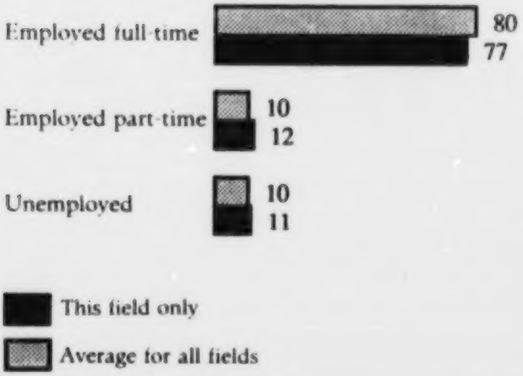
Physical Education

University (4 years)

- Undergraduate (4 years)
- Master's (2 years)
- Doctorate (3 years)

Of those undergraduates who entered the labour force, about 75% found full-time jobs. A lower proportion than average of master's graduates entered the labour force with slightly better-than-average success. More PhD graduates from this program tended to pursue further schooling than other doctorate graduates. However, those who did look for jobs were marginally more successful than their counterparts in other fields. Most bachelor's graduates became elementary school teachers. Some found jobs in management and administration as well as in recreation as coaches and instructors. Master's graduates mostly found teaching and teaching-related jobs; PhD graduates found teaching jobs at the university level. A much greater proportion of graduates at the master's and doctorate levels than the bachelor's level reported they would select the same program again.

Destination of Graduates (%)

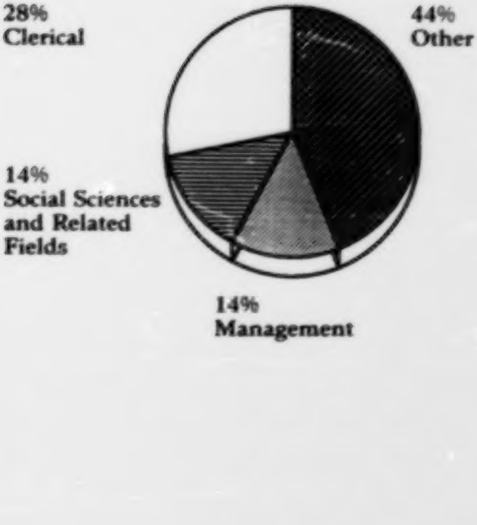


Sports and Recreation

Community College (2 years)

Of those graduates who entered the labour force, 89% found jobs, with a larger proportion than average (12%) employed part-time. Sports and recreation graduates working full-time two years after graduation were employed mostly as travel clerks, welfare and community service workers, or managers in the travel service or health and social science industries. In general, they were as satisfied with their current employment and the match between their job and the field of study as other community college graduates.

Full-time Occupation of Graduates



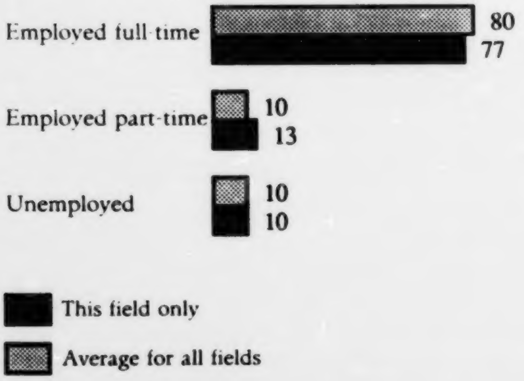
Teaching (Other)

University

- Undergraduate (3 years)
- Master's (2 years)

Undergraduates in this field were less likely than average to pursue higher education; the majority entered the labour force and about 90% found work. Master's graduates were very succesful in their job search, with only 4% unemployment. Of all the undergraduates in teaching, bachelor's graduates from this field were the most likely to find employment related to teaching. Two years after graduation, about 60% were working as elementary or kindergarten teachers. Master's graduates were employed mostly as secondary school teachers. Bachelor's graduates employed full-time had a high level of job satisfaction, and fewer than average thought they were over-qualified. Despite this, 40% stated they would not select the same program again. Almost all master's graduates felt their present job matched their field of study but only 70%, compared with 80% of all master's graduates, would choose the same course again.

Destination of Graduates (%)

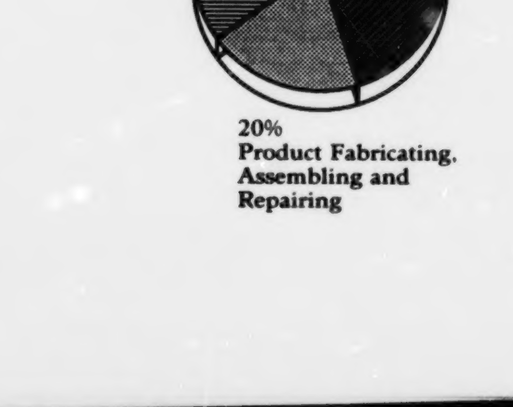


Architectural Design/Draughting Technologies

Trade Schools (10 months)

A slightly greater-than-average proportion of these graduates entered the labour force upon completion of their program. They were not quite as successful in their job search as other trade/vocational graduates, as reflected by their 27% unemployment rate. Those working full-time two years after graduation were employed mostly in construction trades in carpentry and related occupations, or as cabinet and wood furniture makers. A significantly higher-than-average proportion reported they would be ready to select the same training program again.

Full-time Occupation of Graduates

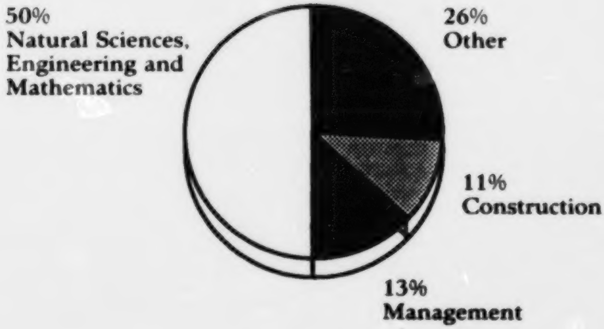


Architectural Design/Draughting Technologies

Community College (3 years)

Fewer architectural design/draughting graduates than other college graduates entered the labour force, while a greater-than-average number continued their education. Those looking for work had slightly more difficulty in finding a job than graduates from other college fields of study. Full-time employed graduates were working mostly as draughtspersons in the architectural, engineering and other scientific and technical service industries. In keeping with slightly higher-than-average unemployment, a low rate of correspondence between field of study and job, and lower-than-average annual salaries, only about 50% of these graduates stated they would select the same course again.

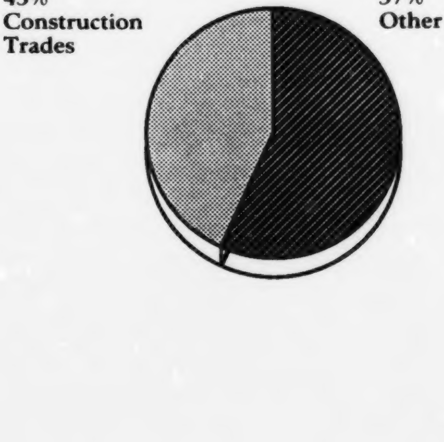
Full-time Occupation of Graduates



Construction Technologies
Trade Schools (11 months)

More graduates from these training programs than from other fields entered the labour market, although a lower-than-average number of them found full-time jobs. Only about half the graduates who had looked for work were employed full-time two years after graduation. A significant proportion were working in construction trades. Given the unfavourable market conditions faced by graduates from this field, it is no surprise that only about 55%, compared to 60% of other trade/vocational graduates, stated that they would take the same educational program again.

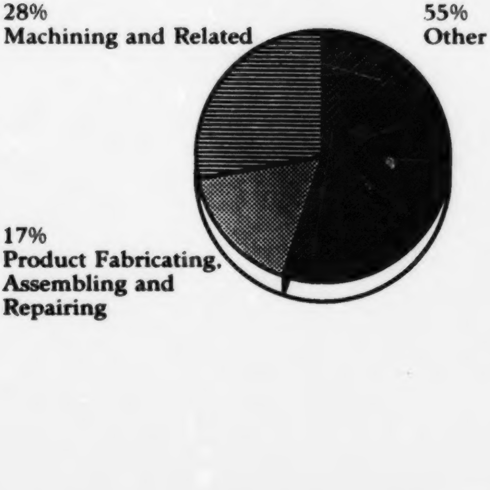
Full-time Occupation of Graduates



Welding Technologies
Trade Schools (9 months)

Although a slightly greater-than-average proportion of graduates from these training programs looked for work, almost one-third were unable to find jobs. Most of those who did were working in welding and flame cutting occupations. Others found work in product fabricating and assembling occupations. Considering the high unemployment rate and the variety of occupations entered by these graduates, it is not surprising that only half had jobs related to their educational program. They were also more likely than others to feel over-qualified for their current job, and a greater proportion stated they would not repeat the same educational program again.

Full-time Occupation of Graduates

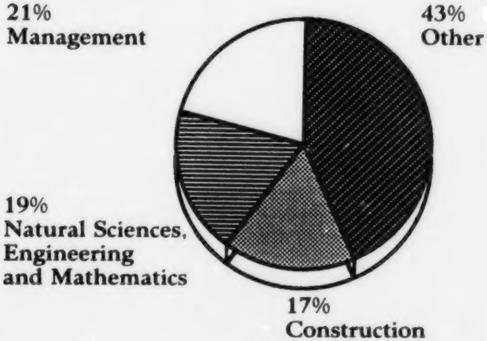


Other Architectural and Construction Technologies

Community College (2 years)

More graduates from this field than other college fields of study entered the labour force. Although their unemployment rate was average, most had full-time jobs as draughtspersons in the trade contracting industries. Of the graduates who did not enter the labour force, about 70% pursued higher education. The relatively low level of job satisfaction coupled with annual salaries that were only average for this level may explain why only 60% of these graduates would select the same course if they had to choose again.

Full-time Occupation of Graduates



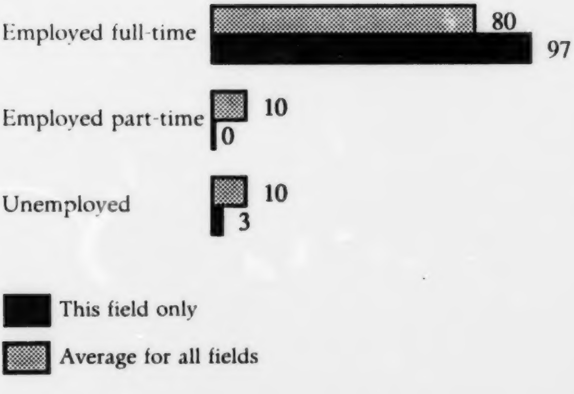
Architecture

University

- Undergraduate (4 years)
- Master's (4 years)

An average proportion of architecture undergraduates entered the labour force upon completion of their program. Of these, only 2% remained unemployed. Almost half found work as architects, while others worked in related occupations in the architecture and engineering fields. A much-greater-than-average proportion of master's graduates entered the labour force and of these about 10% remained unemployed. Those working full-time two years after graduation were mostly employed as architects in the architectural engineering and other scientific and technical services industry. Bachelor's graduates were more satisfied with their job than graduates in other fields, and less likely to feel over-qualified. Only an average number of master's graduates, who were more likely to feel over-qualified for their job, would take the same course if they had to choose again.

Destination of Graduates (%)



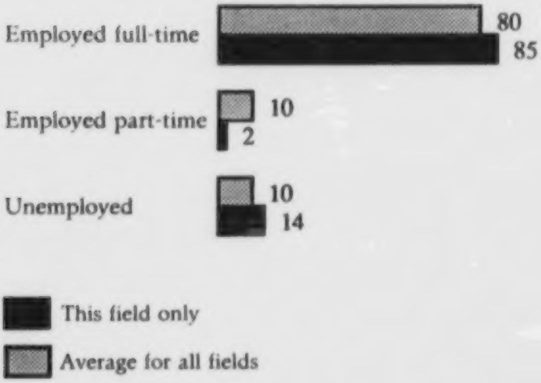
Chemical Engineering

University

- Undergraduate (4 years)
- Master's (2 years)
- Doctorate (3 years)

Of those undergraduates who entered the labour force upon completion of their program, 15% remained unemployed. The majority of those who did find jobs were employed in the natural sciences, engineering and mathematics, especially in chemical engineering positions. A far lower-than-average proportion of master's graduates entered the labour force and of these 13% remained unemployed. Employed graduates were mostly working as engineers although not necessarily as chemical engineers. Almost all doctorate graduates looked for work and almost all found jobs in the natural sciences, engineering and mathematics fields. Undergraduates from this field of study were reasonably satisfied with their jobs; master's graduates were not; and PhD graduates were very satisfied even though less than the average would choose the same course again.

Destination of Graduates (%)

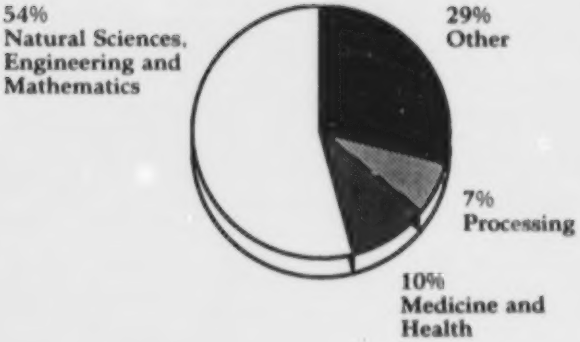


Chemical Engineering Technologies

Community College (3 years)

According to 1984 data an average proportion of the graduates in this field (82%) entered the labour force upon graduation. Most found full-time jobs and a slightly lower-than-average proportion remained unemployed. They were employed mostly as physical science technologists and technicians in the chemical and chemical products industries, and as chemist and medical laboratory technologists and technicians. An average proportion thought their current job matched the field of study, a significantly lower-than-average number did not feel over-qualified for their present job, and they were also earning slightly more than graduates in other college fields of study.

Full-time Occupation of Graduates



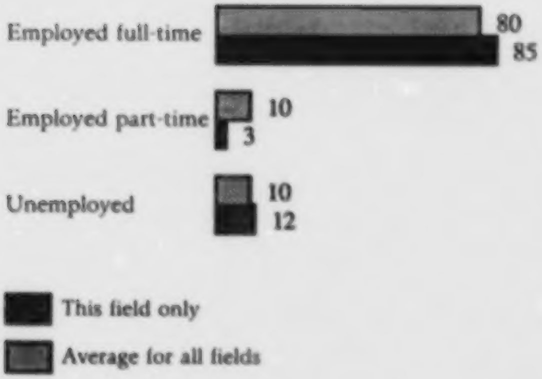
Civil Engineering

University

- Undergraduate (4 years)
- Master's (2 years)
- Doctorate (4 years)

According to 1984 data, a larger-than-average proportion of undergraduates entered the labour force on completion of their program. Although they had a better chance than graduates from other fields in finding full-time jobs they still had slightly higher-than-average unemployment. Of those working full-time, most were employed in the natural sciences, engineering and mathematics. More than 40% were working as civil engineers. Of the master's graduates, who had a slightly easier time finding jobs, most were employed as civil engineers in the architectural engineering and other scientific and technical services industry. All doctorate graduates entered the work force but 8% did not find jobs. Those who did were working in engineering or teaching at university level.

Destination of Graduates (%)

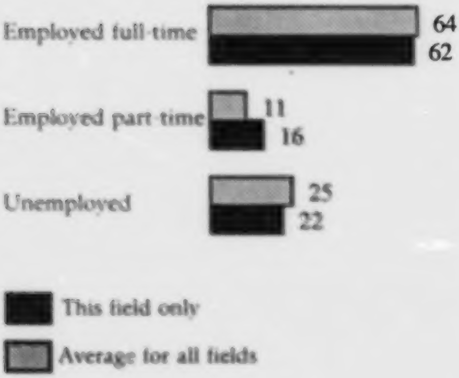


Civil Technologies

Trade Schools (8 months)

A slightly greater-than-average proportion of trade/vocational graduates in this field entered the labour force, where they fared relatively well. Although these graduates had an average unemployment rate, only half of those working full-time had jobs related to their educational program. They felt over-qualified for their current job, and stated that they probably would not make the same educational choice again. College graduates in this field were slightly more successful in the labour market.

Destination of Graduates (%)

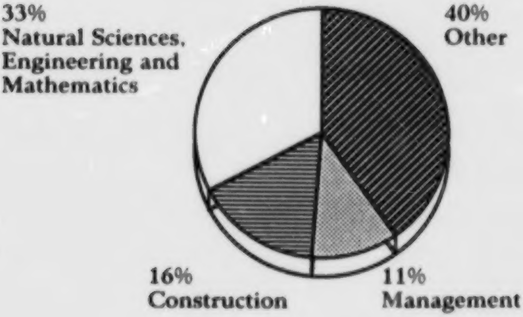


Civil Technologies

Community College (2 years)

Although upon graduation about the same proportion of graduates in this course of study as in other college courses entered the labour force, they were much less successful. About 60% of the graduates who did not enter the labour force continued their education. Those who did find jobs were mainly employed in architecture and engineering. Civil technologies graduates' relatively poor transition from school to the labour market is reflected in their opinions concerning the course of study and the jobs they found. Only about 70% thought that their current job matched the field of study, 50% felt over-qualified, and only about 45% stated they would follow the same educational route if they had to choose again.

Full-time Occupation of Graduates



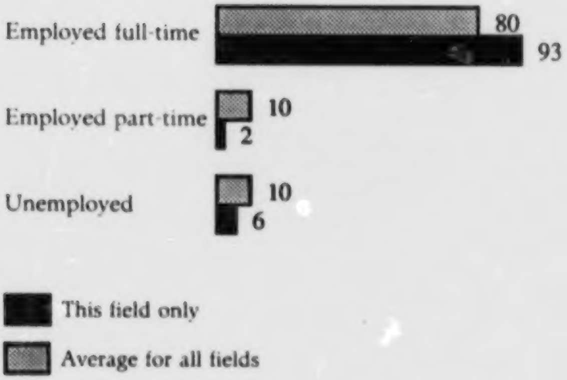
Electrical Engineering

University

- Undergraduate (4 years)
- Master's (3 years)
- Doctorate (4 years)

Upon graduation, a greater-than-average proportion of undergraduates from this program entered the labour force, and about 95% found full-time employment, the majority in electrical engineering, some in occupations related to computers and product fabricating. Master's graduates in this field had the best employment rate of all engineering fields of study at the master's level, finding work mainly as electrical engineers in communications and the electronic equipment industry. All PhD graduates in this field found jobs. A higher-than-average proportion of bachelor's graduates and PhD graduates in this field would choose the same course of study again, but a smaller-than-average proportion of master's graduates would.

Destination of Graduates (%)

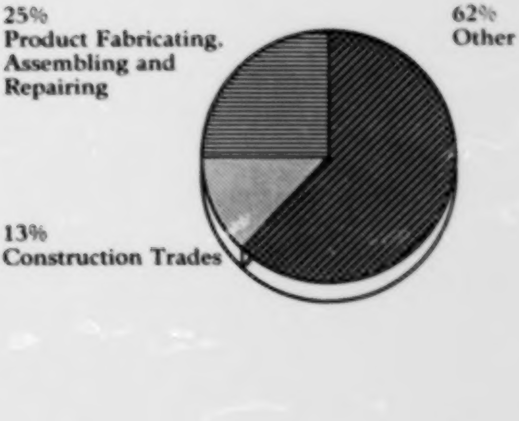


Electrical/Electronic Engineering Technologies

Trade Schools (10 months)

Graduates from this field of study entered the labour force in a proportion comparable to the average for this level. They fared slightly better than other graduates, with lower unemployment rates and a higher-than-average number who were working full-time. Many found jobs in fabricating, assembling and repairing electrical/electronic equipment. Others were employed in the construction trades. A relatively lower-than-average number of graduates stated they would be ready to make the same educational choice again. College graduates in the same field reported better success at finding jobs.

Full-time Occupation of Graduates

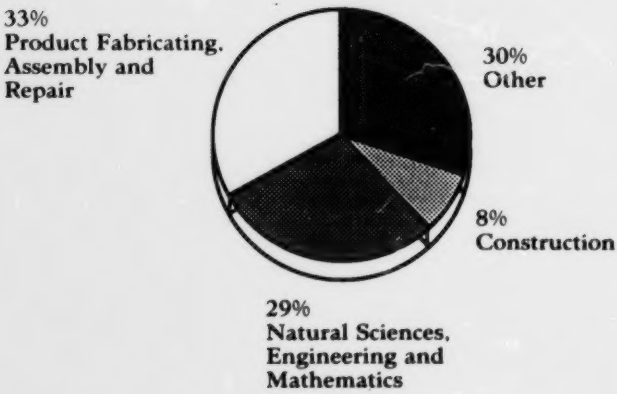


Electrical/Electronic Engineering Technologies

Community College (2 years)

Of these graduates, 82% entered the labour force after graduation, and about 10% continued their education. Those working full-time two years after graduation were employed as electrical/electronic equipment installers and repairers and engineering technologists and technicians. The transition from school to work for this group was about average: very few (30%) felt over-qualified for their jobs, and with slightly higher-than-average annual salaries, 65% stated they would select the same course if they had to choose again.

Full-time Occupation of Graduates

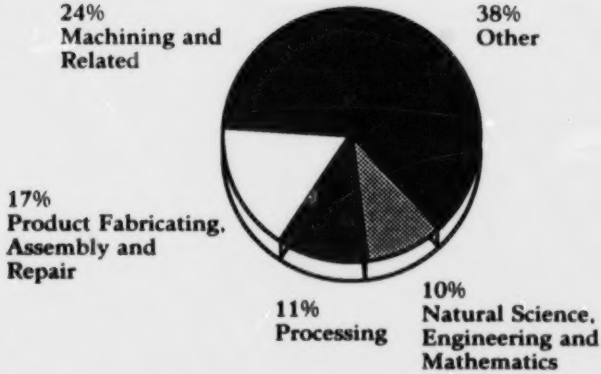


Industrial Engineering Technologies

Community College (2 years)

Upon graduation, a slightly greater-than-average proportion of graduates in this field entered the labour force, and most found full-time jobs as machinists, machine tool set-up workers and tool and die makers in the hardware, tool and cutlery industry. In spite of their relative success in finding jobs, many felt over-qualified for their work, and only about 60% said they would select the same course if they had to choose again.

Full-time Occupation of Graduates

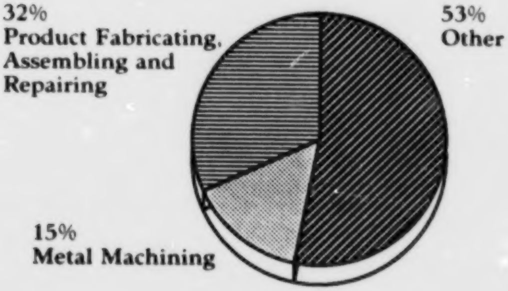


Industrial Engineering Technologies (Machinist)

Trade Schools (12 months)

An average proportion of graduates from this training program entered the labour force where they faced better labour market conditions than most. They had little difficulty finding work, and about 80% were employed full-time in product fabricating, assembling, repairing and metal machining. Despite their low unemployment rate, they did not seem to enjoy their jobs as much as other graduates at the trade/vocational level. Many could not find jobs that matched their training program and felt over-qualified for the jobs they did find. Consistent with these statistics, many stated that they were dissatisfied with their present job.

Full-time Occupation of Graduates

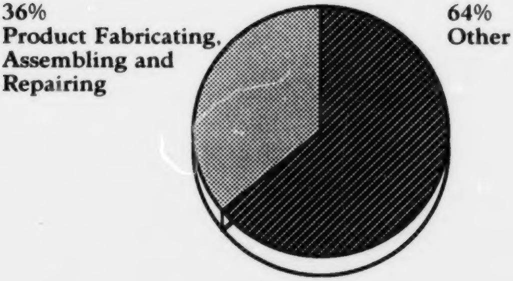


Industrial Engineering Technologies (Manufacturing)

Trade Schools (6 months)

The destinations of these graduates are typical for this level. An average proportion entered the labour force, with an unemployment rate of 23%, compared with an average of 25% for this level. Employed graduates were mostly in product fabricating, assembling and repairing occupations. Although this group was more likely to find jobs unrelated to their training, and more likely to feel over-qualified for their current job, still, the majority stated that they were satisfied.

Full-time Occupation of Graduates



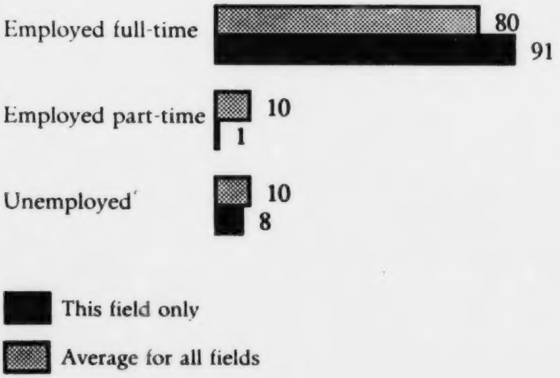
Mechanical Engineering

University

- Undergraduate (4 years)
- Master's (2 years)
- Doctorate (4 years)

An average proportion of undergraduates in this field pursued further training after graduation. Almost all the rest entered the job market where they had above-average success, finding jobs mostly related to engineering. Approximately 25% reported working as mechanical engineers. Master's graduates had about average success in the job hunt, mostly ending up working as electrical engineers. Most doctorate graduates entered the labour market and all were successful at finding employment, three-quarters of them in the engineering field. Mechanical engineering undergraduates and PhD graduates were generally satisfied with their course of study, and a greater-than-average proportion would follow the same educational route again. However, master's graduates were not as happy with their choice even though they were as successful at finding work.

Destination of Graduates (%)

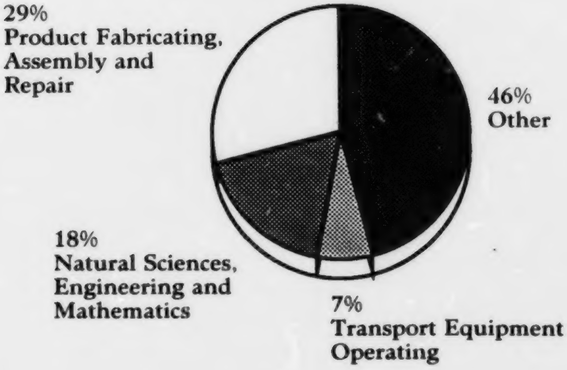


Mechanical Technologies

Community College (2 years)

About 82% of the graduates from this field entered the labour force after graduation. About 15% continued their education. The unemployment rate was about the same as the average for all college fields of study (10%), but a slightly higher proportion of mechanical technologies graduates were employed on a full-time basis, mainly as motor vehicle mechanics and repairers and as industrial, farm and construction machinery mechanics and repairers. An average proportion of these graduates were satisfied with their current job, but only about 60% would follow the same educational route again.

Full-time Occupation of Graduates

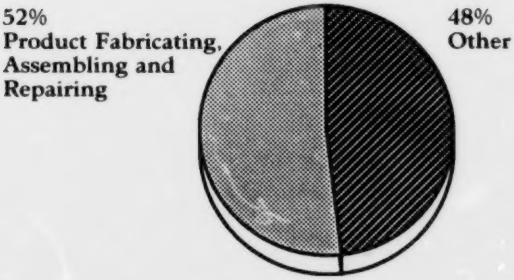


Auto Body Repairs

Trade Schools (12 months)

Although a greater than-average proportion of graduates entered the labour force, a great many of them remained unemployed. Of those who did find jobs, more than half were working in product fabricating, assembling and repairing occupations, especially as motor vehicle mechanics and repairers (auto body repairers). These graduates were less likely to find jobs that matched their training, and many felt over-qualified for their current job.

Full-time Occupation of Graduates

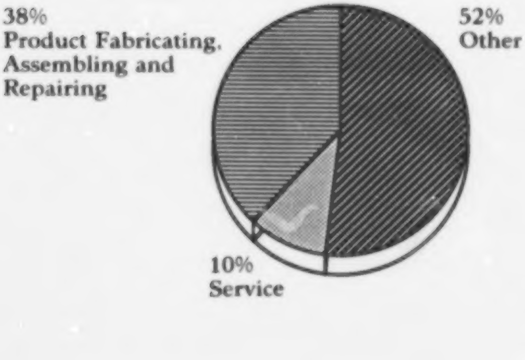


Auto Mechanics

Trade Schools (11 months)

More than the usual proportion of these graduates entered the labour force upon graduation, finding work mainly as motor vehicle mechanics and repairers. Of those who were employed full-time, a lower-than-average proportion found jobs related to their training, and many felt they were over-qualified for their current job. However, an average proportion stated they would make the same educational choice again.

Full-time Occupation of Graduates

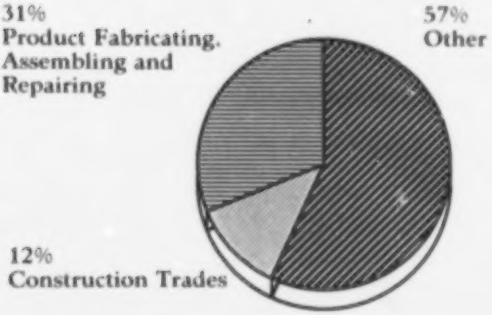


Heavy Equipment Mechanics

Trade Schools (9 months)

On average, more graduates from this program entered the labour force than from other trade/vocational programs. They were relatively successful in finding jobs, with almost one-third entering occupations in product fabricating, assembling and repairing. A significant proportion found jobs as industrial, farm and construction machinery mechanics and repairers, while another large number were employed in the construction trades. Only an average proportion of these graduates were satisfied with their current jobs. Many also thought they were over-qualified.

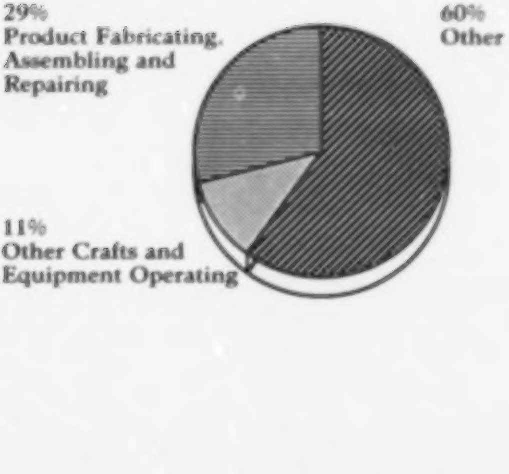
Full-time Occupation of Graduates



Other Mechanical Engineering Technologies
Trade Schools (10 months)

Upon completion of their program, the majority of graduates in this field entered the labour force, where they fared relatively well. They mostly found jobs in product fabricating, assembling and repairing or in equipment operating occupations. In general, graduates who were employed full-time were as satisfied with their job as was average for this level. In spite of the relatively good labour market outcomes of these graduates, only about 55% stated they would make the same educational choice again.

Full-time Occupation of Graduates



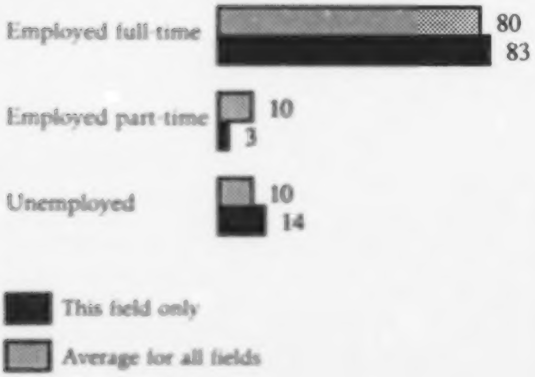
Other Engineering

University

- Undergraduate (4 years)
- Master's (2 years)
- Doctorate (3 years)

Those undergraduates who entered the labour force were not too successful: their unemployment rate was greater-than-average for this level. Those who did find jobs were working mainly as electrical engineers and systems analysts. Although a greater proportion of master's graduates entered the labour force, they were not as successful either, with a slightly higher unemployment rate than other master's graduates. Doctorate graduates were much more likely to continue their studies than look for work. Those who did had a higher-than-average unemployment rate. The bulk of the jobs were in engineering or university teaching. A lower-than-average proportion of master's and PhD graduates would take the same course again; the undergraduates were more satisfied with their educational choice.

Destination of Graduates (%)

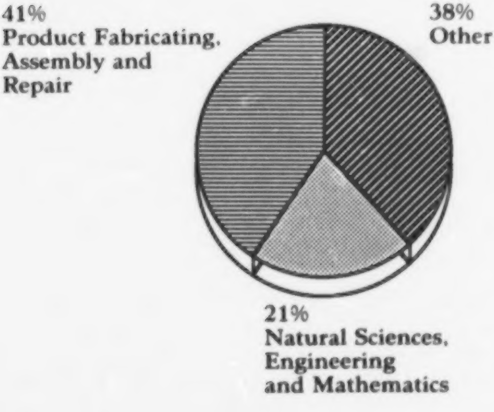


Instrumentation

Community College (2 years)

Upon graduation, more than the usual proportion of graduates in this field entered the labour force, with about average success at finding jobs, mainly as precision instrument mechanics and repairers. Although the transition from school to work was about the same for these graduates as for other college graduates, they were generally less satisfied with their jobs. A slightly smaller-than-average proportion stated they would choose the same educational route again.

Full-time Occupation of Graduates

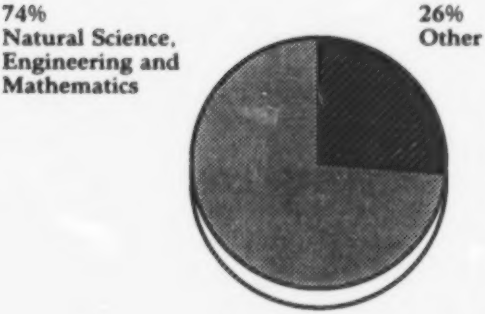


Other Engineering Technologies (Surveying)

Community College (2 years)

Upon graduation, 25% of surveying graduates continued their education. Those who did look for jobs had a difficult time finding work (14% unemployment). Graduates working full-time two years after graduation were employed mostly as surveyors in the architectural, engineering and other scientific and technical service industry. In spite of a poor labour market outcome, their job satisfaction was greater than for most other college graduates. Most thought their current job matched their field of study, and few considered themselves over-qualified for their position.

Full-time Occupation of Graduates

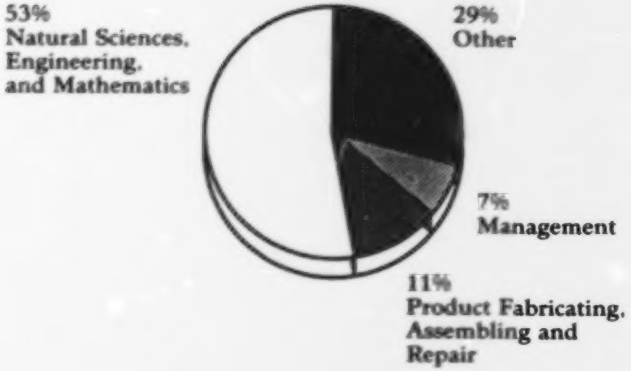


Other Engineering Technologies

Community College (2 years)

Upon graduation, fewer of these graduates than other college graduates entered the labour force, and those who did had difficulty in finding a job, either full- or part-time. Graduates working full-time two years after graduation were employed mostly as draughtspersons, surveyors or engineering technologists or technicians. The remainder were working in various other occupations, particularly in product fabricating, assembly and repair, and management. Despite their difficulty in finding jobs, an average proportion were satisfied with their current job and did not feel over-qualified.

Full-time Occupation of Graduates

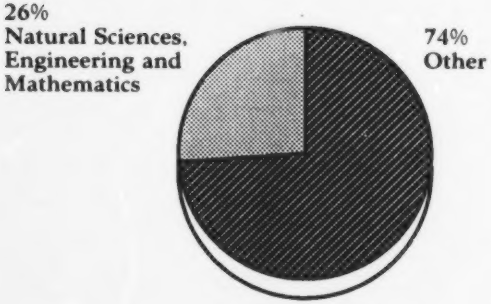


Other Engineering Technologies (Draughting)

Trade Schools (11 months)

Although a greater-than-average proportion of graduates decided to stay in school upon completion of their program, the majority entered the labour force to face a difficult time finding jobs. Two years after graduation, a large proportion of graduates employed full-time were working in the natural sciences, engineering and mathematics. Draughting graduates were not as pleased with their early experiences in the labour market as other trade/vocational graduates, and only about 55% would make the same educational choice again.

Full-time Occupation of Graduates

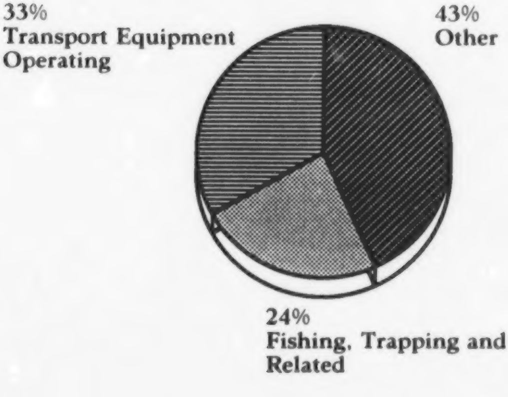


Transportation Engineering Technologies

Trade Schools (3 months)

Upon graduation, an average proportion of graduates in this course of study entered the labour force. Their unemployment rate (26%) and full-time employment rate (63%), are average for this level. A significant proportion were working as truck drivers and another important percentage, probably trained in marine transportation, found work in the fishing industry. Despite only average satisfaction with their jobs, a higher-than-average proportion stated they would take the same program again. College graduates in this course of study reported slightly better success in the labour market.

Full-time Occupation of Graduates

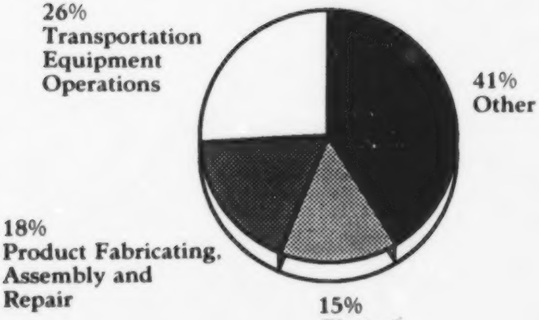


Transportation Technologies

Community College (2 years)

Upon graduation, very few graduates in this field, as compared with other college fields, entered the labour force, where they had much greater difficulty finding work, either full or part-time. Those who did were working mostly as deck officers, pilots or aircraft mechanics. Perhaps because of their relatively poor experience in the job market, graduates in this field were negative about the course and their current job. In keeping with their high unemployment rate and lower-than-average level of job satisfaction, only about 60% said they would select the same course if they had to choose again.

Full-time Occupation of Graduates



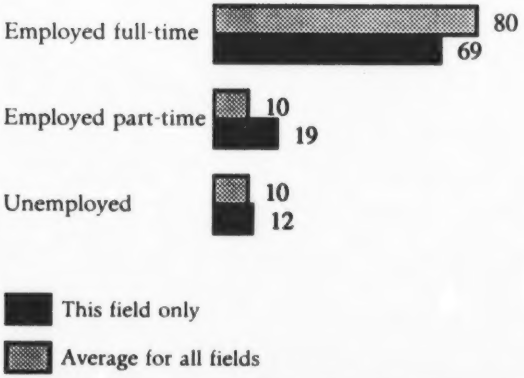
English

University

- Undergraduate (3 years)
- Master's (2 years)
- Doctorate (5 years)

This undergraduate program is characterized by the large number of bachelor's graduates who were enrolled on a part-time basis. Those who entered the labour force were less successful in finding a full-time job than other undergraduates. Many were working as elementary or secondary school teachers two years after graduation. Others found jobs in clerical and management and administrative occupations. Only about 60% of master's graduates found full-time employment, mostly as secondary school teachers. Doctorate graduates had a much higher-than-average unemployment rate. About 20% found only part-time work. Few undergraduates reported that their job was linked to their education, and more than half considered themselves over-qualified for their job. Even though master's and PhD graduates had a difficult transition from school to work and were not particularly satisfied with their jobs, a more-than-average number of master's graduates and an average number of PhDs still said they would choose the same course again.

Destination of Graduates (%)



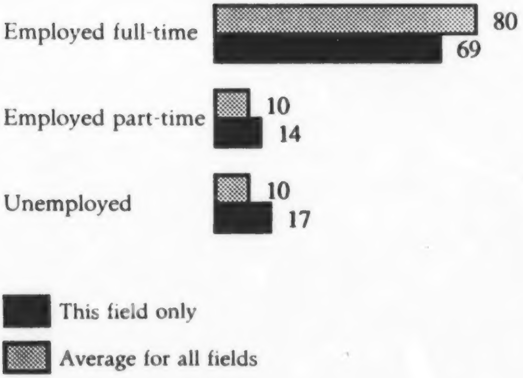
French

University

- Undergraduate (3 years)
- Master's (2 years)
- Doctorate (5 years)

French undergraduates were more likely than most to continue their studies. Those who looked for jobs did not find them easily, especially full-time work: teaching and clerical work was the prevalent employment. The unemployment rate for master's graduates does not seem as high as it actually is because so many worked part-time. The PhD graduate unemployment rate was more than twice the rate for the whole PhD level. Although few bachelor's graduates found their job corresponded to their program of study, and felt over-qualified for the job, they were generally satisfied with their employment. The same attitudes were true of master's graduates but they were generally dissatisfied with only about 55%, as compared with 80% of all master's graduates, who would take the same course again. Most PhD graduates were satisfied with their employment.

Destination of Graduates (%)



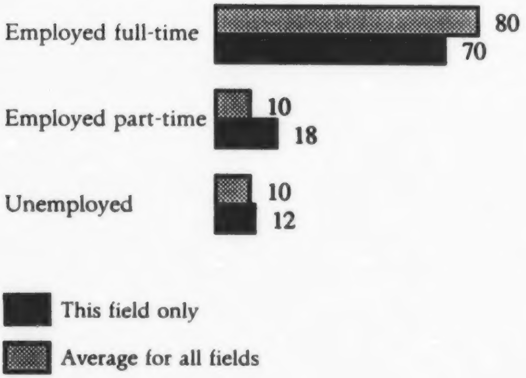
History

University

- Undergraduate (3 years)
- Master's (2 years)
- Doctorate (5 years)

Overall, the number of undergraduates in history who entered the labour force was lower than in other fields, and a less-than-average percentage found full-time jobs either in teaching, in the social sciences (as historians) or doing clerical work. Only 50% of master's graduates entered the labour force, and these had a higher-than-average unemployment rate of 15%. They found work in the social sciences (as historians) or in teaching. PhD graduates were more successful in the job market, with more than half going into teaching. Graduates in history at the master's and doctorate levels were much happier with their jobs than bachelor's degree holders, who felt over-qualified and dissatisfied with their current jobs.

Destination of Graduates (%)



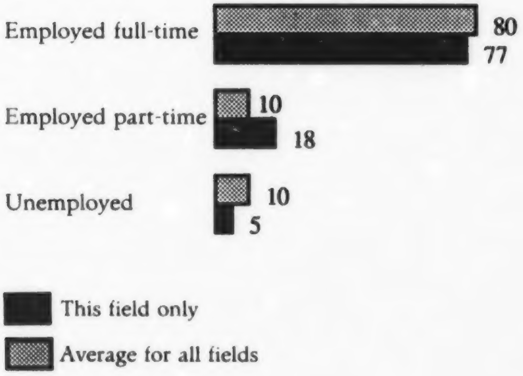
Library and Records Science

University

- Master's (2 years)

Of the relatively large proportion of graduates who entered the labour force (80%), more than the average for this level found work, mostly as librarians and archivists. Their unemployment rate was only about 6%. Not only was the transition from school to work more successful for this group but they seemed satisfied with their jobs and did not feel particularly over-qualified. Approximately 85% indicated that they would take the same course if they had to choose again.

Destination of Graduates (%)



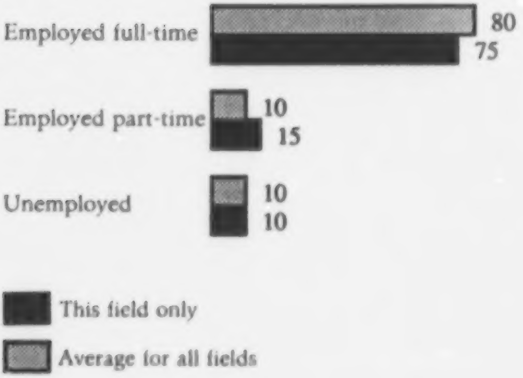
Linguistics, Translation and Interpretation

University

- Undergraduate (3 years)
- Master's (2 years)

About 20% of bachelor's graduates continued their education and almost all the rest entered the labour force, with average success: only 9% remained unemployed two years after graduation. Approximately 30% found work as translators and interpreters. An average proportion of master's graduates entered the labour force with less-than-average success. Of those who found jobs, most were employed as translators and interpreters. Both bachelor's and master's graduates found it difficult to find jobs that matched their studies, felt over-qualified and were more dissatisfied with their employment than the average.

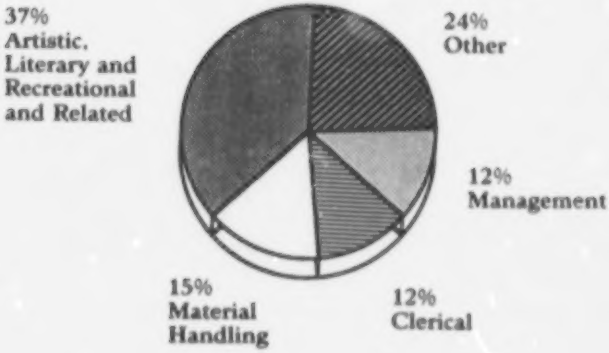
Destination of Graduates (%)



Mass Communication
Community College (2 years)

About 11% of these graduates continued their education, and an average number entered the labour force, mainly as writers or editors in the telecommunication broadcasting and the printing and publishing industries. Others had jobs in many different areas, particularly in management and clerical occupations. In general, these graduates were not as satisfied with their labour market outcome as other college graduates: about half considered themselves over-qualified for their present job, but even so, an average proportion said they would still select the same course again.

Full-time Occupation of Graduates



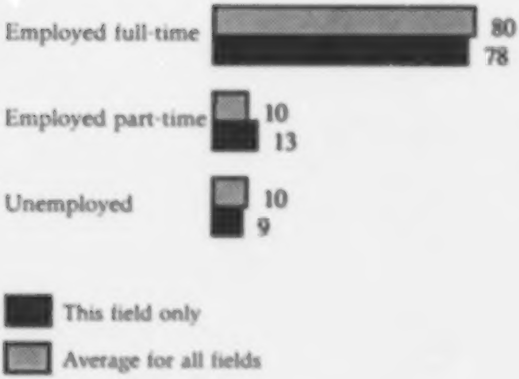
Mass Communication

University

- Undergraduate (3 years)

The majority of these graduates entered the labour force, and 90% found either full-time or part-time jobs in occupations related to management or administration and literary and performing arts, as writers, editors, producers or directors. More than half considered themselves over-qualified for their job. This, coupled with an average unemployment rate and overall dissatisfaction with their employment led only about 55% to say that they would select the same program of study.

Destination of Graduates (%)



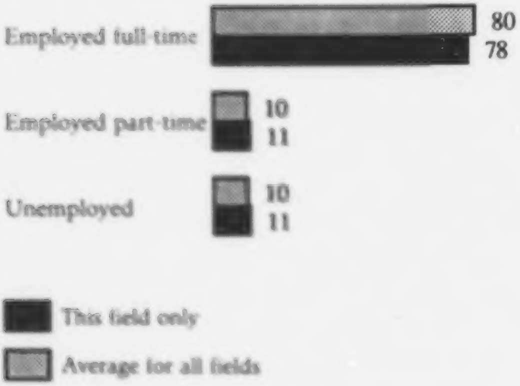
Religious and Theological Studies

University

- Undergraduate (3 years)
- Master's (2 years)
- Doctorate (4 years)

A dramatically greater-than-average proportion of undergraduates entered the labour force upon completion of their program, with about average success. Two years after obtaining their degree, 30% were employed mainly as ministers of religion. Another significant number had found work in the teaching field. More master's graduates than the average entered the household sector rather than the labour force. They had about average success finding work as ministers or teachers. All PhD graduates entered the labour force but were more successful at finding part-time than full-time work. About 60% of those working were ministers. All three levels of graduates were satisfied with their jobs, although most PhD graduates felt over-qualified.

Destination of Graduates (%)



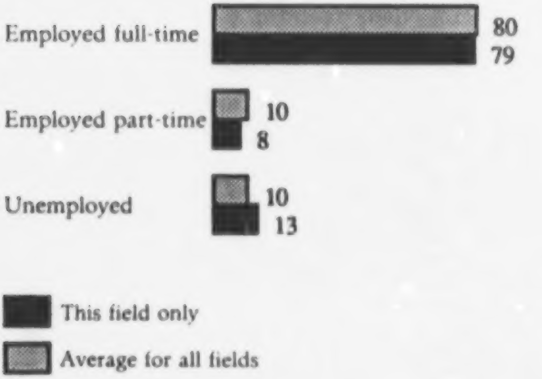
Basic Medical Sciences

University

- Master's (2 years)
- Doctorate (4 years)

Upon graduation, very few master's graduates entered the labour force, while most continued their education. Those who looked for employment had a relatively high unemployment rate of 16%. Those working were mostly employed as university teachers or physicians and surgeons in universities or hospitals, some as medical laboratory technologists and technicians and in life science occupations. Only 80% of PhD graduates entered the labour force mainly as university teachers, but a lower-than-average proportion found work: none worked part-time. A larger proportion of master's graduates were satisfied with their current job even though annual salaries were lower than the average. An average number of doctorate graduates reported that they were satisfied with their job, and all felt that their employment matched their field of study.

Destination of Graduates (%)



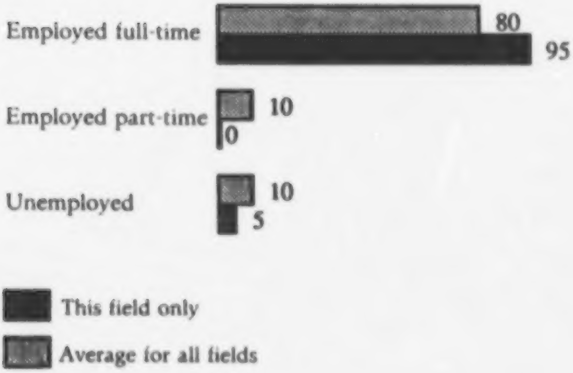
Dentistry

University

- Undergraduate (4 years)
- Master's (2 years)

Dentistry graduates have the highest rates of labour force participation at the undergraduate level. They were very successful in finding full-time jobs, virtually all as dentists; about 85% were in private practice. A very high proportion of master's graduates entered the work force, and all found jobs, mostly as dentists in private practice. Both levels of graduates were highly satisfied with their employment, all agreed that their job was related to their studies, and a very high proportion would take the same course again, especially master's graduates, whose average annual salary was the second highest at this level.

Destination of Graduates (%)

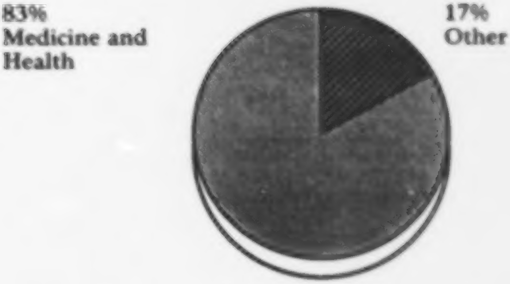


Dental Hygiene/Assistant Technologies

Trade Schools (10 months)

More graduates in this training program entered the labour force than from other fields at this level, working mainly as dental hygienists and dental assistants. Only 7% did not find a job. They were also more likely than other trade-level graduates to find employment. Because of such favourable conditions, almost all the graduates working full-time had jobs related to their training and were satisfied with them. Only about 35% of the graduates, compared with 65% of all trade/vocational graduates, felt overqualified; the majority were quite satisfied with their training. College graduates in this field of study had even better success in the labour market.

Full-time Occupation of Graduates

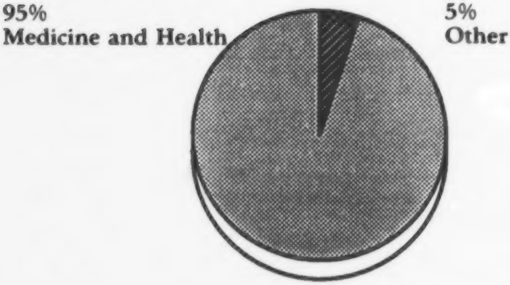


Dental Hygiene/Assistant Technologies

Community College (1 year)

A higher-than-average proportion of these graduates entered the labour force, where they were quite successful in finding jobs as dental hygienists and dental assistants for dentists in private practice. Not only were graduates from this field of study more successful in the transition from school to work than other college graduates, but they also were more positive about their current job and the field of study.

Full-time Occupation of Graduates

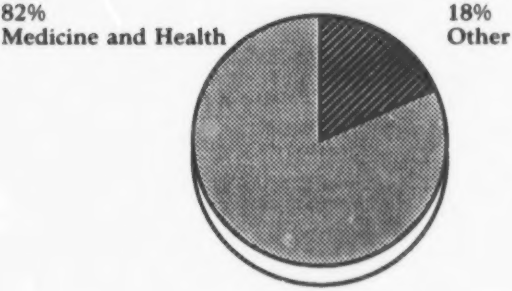


Medical Laboratory Technologies

Community College (3 years)

About 85% of these graduates entered the labour force, of which 20% were only able, either by design or circumstance, to find part-time jobs. The high incidence of part-time employment kept their unemployment rate at 8%. Most full-time employed graduates were medical laboratory technologists and technicians in the hospital or medical and other health laboratory industries. These graduates not only faced less-than-average unemployment, but they also considered themselves over-qualified. About 70% said that they would follow the same educational route if they had to choose again.

Full-time Occupation of Graduates



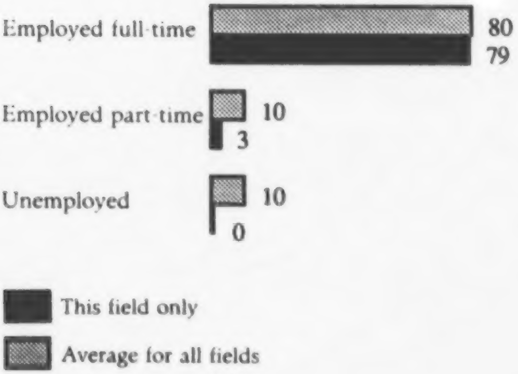
Medical and Surgical Specialties

University

- Master's (3 years)

Upon graduation, an average proportion of graduates became first-time labour force entrants, all of whom found jobs mostly as physicians and surgeons in private practice or in hospitals. However, a dramatically greater-than-average proportion also continued their education. A 1984 survey indicated that the transition from school to work was much more successful for these graduates than for other master's graduates. This, coupled with the fact that they had the highest annual salary at the master's level, led approximately 85% of them to state that they would make the same educational choice again.

Destination of Graduates (%)



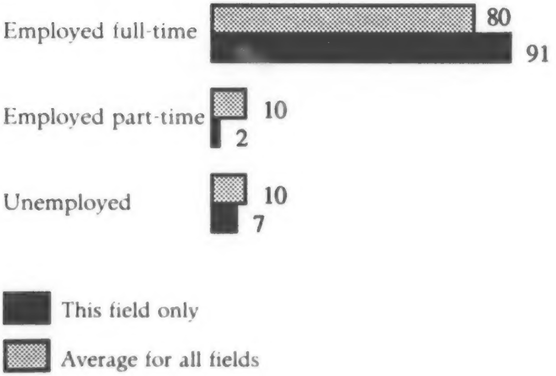
Medicine

University

- Undergraduate (4 years)

Only a small proportion of graduates who entered the labour force could not find work. (This percentage probably included those who dropped out). Almost all full-time employed graduates were working as physicians and surgeons. In general, they were more satisfied with their course of study than other graduates at this level, and most would follow the same educational program again. Almost no graduates considered themselves over-qualified for their current job.

Destination of Graduates (%)

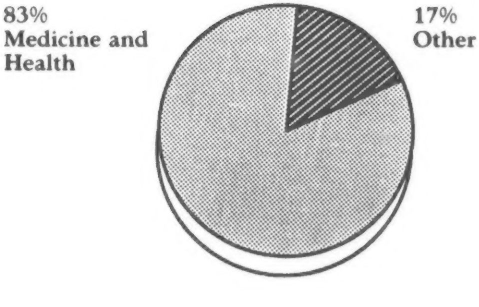


Nursing Aide/Orderly

Trade Schools (9 months)

Upon completion of their program, a slightly higher-than-average proportion of graduates entered the labour force where they were fairly successful in finding work, although much of it, either by design or circumstance, was part-time. Most full-time employed graduates were working as nursing assistants, nursing attendants or nurses. There was a slightly higher correspondence between the jobs held by the graduates in this field and their course of study than for other graduates at this level. Few thought they were overqualified, although these results were gathered only from those who were working full-time.

Full-time Occupation of Graduates

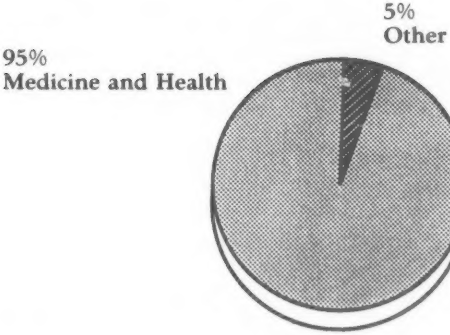


Nursing

Community College (2 years)

Fewer nursing graduates than the norm continued their education, while a significantly greater-than-average proportion entered the labour force with great success: their unemployment rate was only 3%. Graduates working full-time two years after graduation were almost exclusively employed as nurses in the hospital industry. Not only was the average labour market outcome of these graduates significantly better than that of other graduates, but their attitudes were more positive. Almost all the graduates (99%) thought that the field of study matched their current job and only 5% felt over-qualified.

Full-time Occupation of Graduates



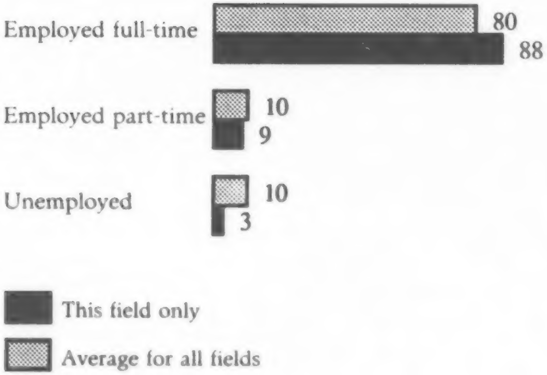
Nursing (Diploma)

University

- Undergraduate (3 years)
- Master's (2 years)

A significantly larger proportion of nursing undergraduates and master's graduates than other graduates at the same level entered the labour force where they had little difficulty finding full-time jobs, the undergraduates mostly as nurses, some as teachers at the post-secondary non-university level, and the master's graduates as university teachers, administrators in medicine and health, and nurses. Only a marginal number remained unemployed. Both levels fared well in the labour market, able to find jobs related to their field of study. Relatively more undergraduates than average, however, considered themselves over-qualified for their current job; most master's graduates did not.

Destination of Graduates (%)

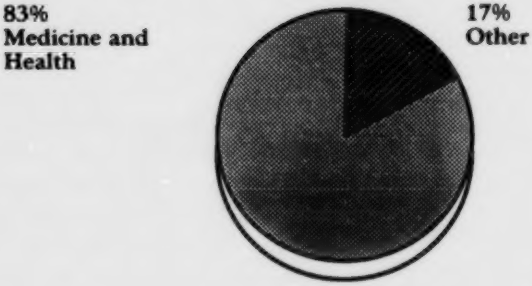


Other Nursing

Trade Schools (8 months)

A lower-than-average proportion of graduates entered the labour force upon completion of their program. Those who looked for a job fared much better than other trade/vocational graduates, finding work as nursing attendants or as nurses. Almost all graduates believed that their job matched their training program and did not feel over-qualified for their current job.

Full-time Occupation of Graduates

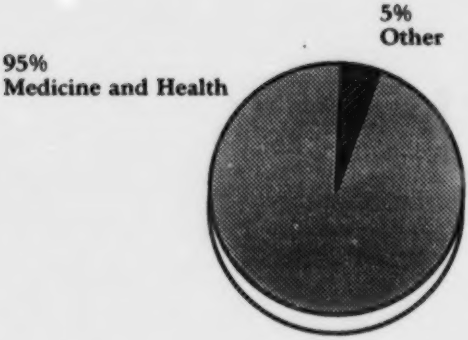


Other Nursing

Community College (2 years)

Only 5% of these graduates continued their education. Of the significantly larger-than-average proportion who decided to look for a job, only 6% could not find work, although 20% were only able to find part-time jobs. Graduates who were working full-time two years after graduation were employed mostly as nurses in the hospital industry. These graduates were very positive about their current employment and the field of study; 65% stated that they would select the same course again.

Full-time Occupation of Graduates

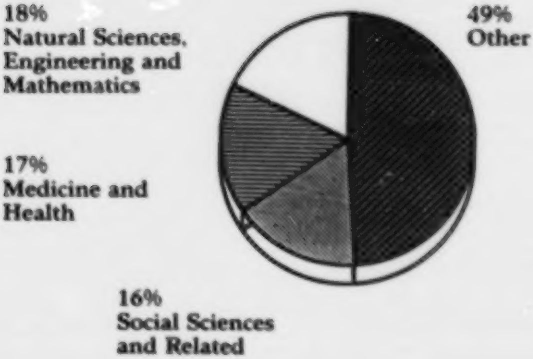


Other Health

Community College (2 years)

Upon graduation a lower-than-average proportion of graduates entered the labour force but were reasonably successful in their job search (8% unemployment), working mostly in the natural sciences, engineering and mathematics, and medical fields or in the health and social services or education. About 50% of the graduates who did not enter the labour force continued their education. Despite the low unemployment rate, a lower-than-average proportion were satisfied with their current job, and many considered themselves over-qualified for their current jobs.

Full-time Occupation of Graduates



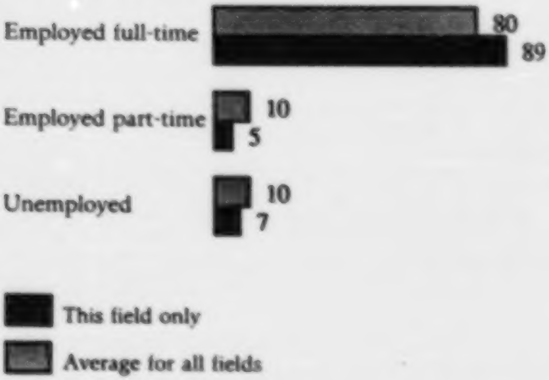
Other Health

University

- Undergraduate (3 years)
- Master's (2 years)

Upon graduation, a greater-than-average proportion of undergraduates entered the labour force and 90% found full-time jobs especially as optometrists, dental hygienists and dental assistants. A large proportion of master's graduates also entered the workforce, where all but 6% found employment in health and medicine, especially as physicians, surgeons or audio and speech therapists. A greater-than-average proportion of undergraduates would follow the same course again, but only an average proportion of master's graduates would, despite the fact that their annual average salary was $10,000 higher than other graduates at this level.

Destination of Graduates (%)



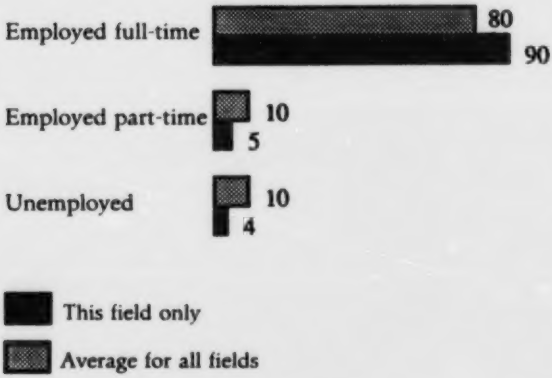
Pharmacy

University

- Undergraduate (4 years)

Graduates from this field had one of the highest rates of participation in the labour force among 1984 graduates and were significantly more successful in finding full-time jobs, mainly as pharmacists. Generally, pharmacy graduates were very positive about their work experiences, with a greater-than-average level of satisfaction with their jobs and the program of study.

Destination of Graduates (%)



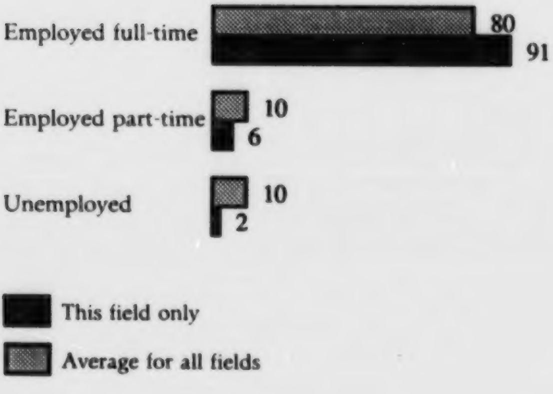
Rehabilitation Medicine

University

- Undergraduate (3 years)
- Master's (2 years)

Almost no undergraduates decided to pursue their education, because of the favourable labour market conditions awaiting them. Unemployment was negligible for these graduates. Nearly all found work as physiotherapists and occupational therapists. Master's graduates were equally successful, with a low unemployment rate (4%), finding work as audio and speech therapists or as physiotherapists. A high proportion of both levels of graduates would choose the same course of study again, even though the average annual salary for master's graduates was $5,000 less than the average for all graduates at this level.

Destination of Graduates (%)

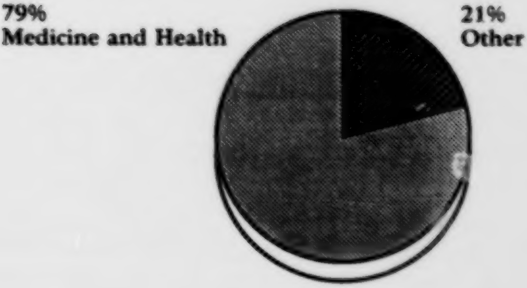


X-Ray/Radiology/Nuclear Medicine Technologies

Community College (2 years)

After graduation, an average proportion of graduates entered the labour force and although, overall, their unemployment rate was also average, the proportion who found full-time jobs was much lower than in other fields of study. Graduates who were working two years after graduation were employed mostly as radiological technologists and technicians in hospitals. In general, they had a much more positive attitude about their field of study and their work than graduates from other college courses.

Full-time Occupation of Graduates

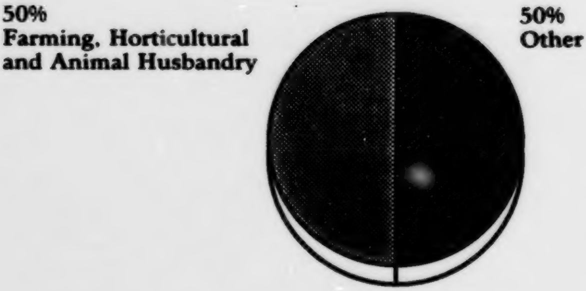


Agriculture

Trade Schools (6 months)

A greater-than-average proportion of agriculture graduates entered the labour force upon completion of their program, where most found jobs in occupations related to farming, horticulture and animal husbandry, especially as nursery and related workers. In spite of their lower unemployment rate, trade-level agriculture graduates were less likely than others to find work related to their training program. Many considered themselves over-qualified for their job, even though they were satisfied with it.

Full-time Occupation of Graduates

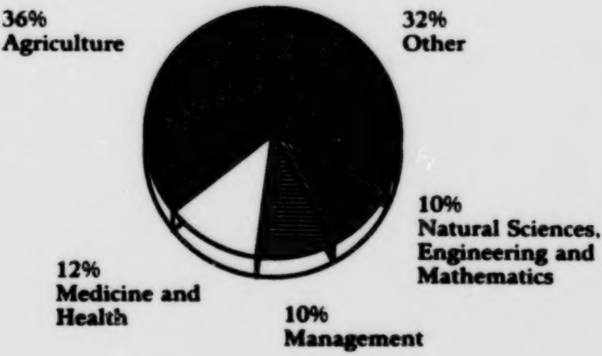


Agriculture

Community College (2 years)

Upon graduation, a greater-than-average proportion of college agriculture graduates entered the labour force. Although an average proportion found employment, more were employed on a full-time basis than graduates from other college courses, mainly as nursery workers/inspectors/farm machinery operators and crop/livestock workers or as agriculturalists or biologists. An average proportion of these graduates (65%) stated they would select the same course if they had to choose again.

Full-time Occupation of Graduates



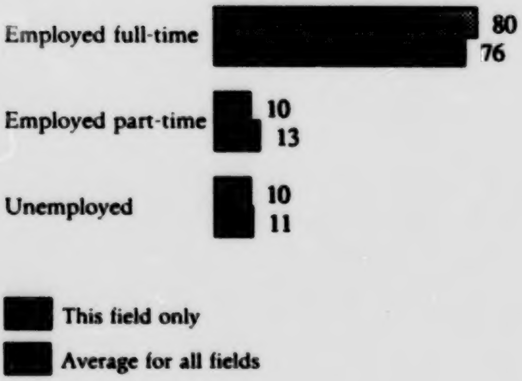
Animal and Plant Sciences

University

- Undergraduate (4 years)
- Master's (2 years)

Undergraduates in this field had an average transition from school to the labour market but were more likely to pursue their formal education, training for occupations such as animal scientist, plant scientist or horticulturist. Those master's graduates who entered the labour force (mainly working in the agricultural chemical industry) faced a high unemployment rate of 19%. Most bachelor's graduates were satisfied with their job and did not consider themselves over-qualified for it. A 1984 survey of 1982 master's graduates suggests that finding jobs is not the sole criteria by which to judge the success of their education. Many were satisfied with their current job and only 25% considered themselves over-qualified.

Destination of Graduates (%)



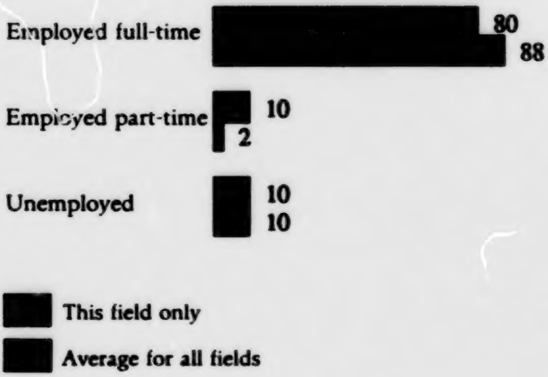
Other Agriculture

University

- Undergraduate (3 years)
- Master's (3 years)

More undergraduates from this field entered the labour force upon completion of their program than other undergraduates. They faced average unemployment but found full-time jobs more easily than graduates from other fields, mainly in farming, animal husbandry and natural sciences. A greater proportion than average were self-employed. A high proportion of master's graduates either entered the household sector or continued their education. Those who entered the labour force faced about a 7% unemployment rate. Both levels of graduates found work related to their studies, and most did not feel over-qualified for their jobs. Despite this, only about 70% of master's graduates would choose the same course again.

Destination of Graduates (%)



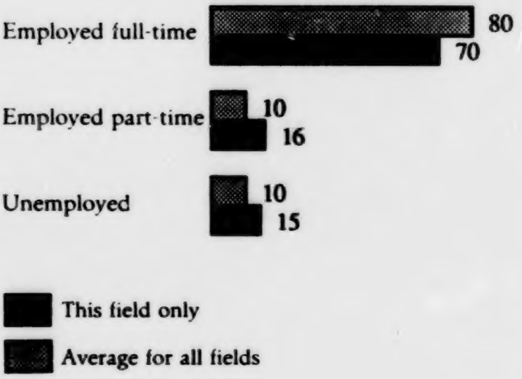
Biology

University

- Undergraduate (3 years)
- Master's (2 years)
- Doctorate (4 years)

Undergraduates in this program had quite a high unemployment rate. Those who did find full-time employment were working as medical laboratory technologists and technicians and research assistants. A large proportion of master's graduates continued their education but those who looked for work were reasonably successful, finding jobs as biologists or university assistants. PhD graduates had an average unemployment rate for this level, about half with full-time jobs were university teachers. All three levels of graduates reported satisfaction with their jobs. In fact biology is one of the few disciplines in which only few graduates felt over-qualified for their jobs.

Destination of Graduates (%)

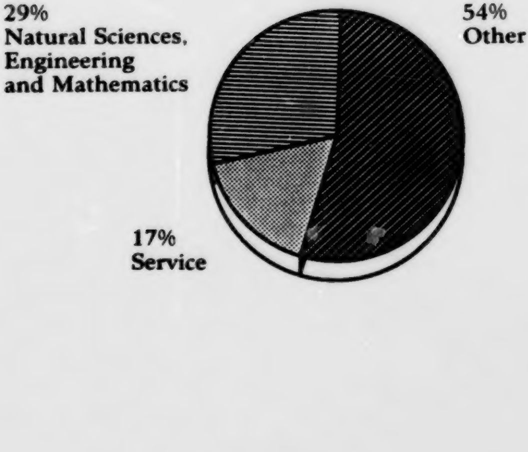


Environmental and Conservation Technologies

Community College (2 years)

Upon graduation, a smaller-than-average proportion of graduates continued their education; a larger-than-average proportion entered the labour force, with average success, most finding work in the natural sciences, engineering, mathematics and services (fire fighting and guides) within the provincial government protective services. Although these graduates were as successful as most other college graduates in the transition from school to work, many thought that their job did not match their field of study and that they were over-qualified for the job.

Full-time Occupation of Graduates



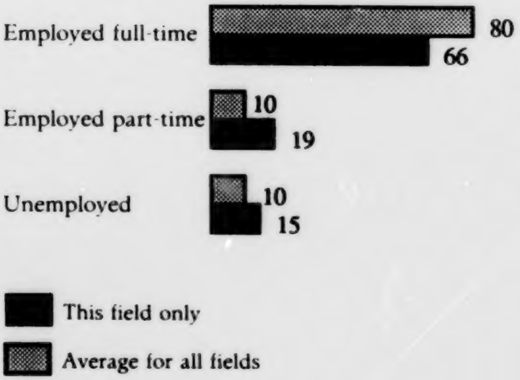
Food and Household Sciences

University

- Undergraduate (4 years)

These graduates entered the labour force at a rate comparable to the average for this level, but were not too successful, as indicated by a 15% unemployment rate and a higher-than-average percentage who were employed part-time. Those who were employed full-time were working in management and administrative occupations, in the teaching field or as dieticians and nutritionists. Only about 55% of the graduates stated that they would choose the same course again.

Destination of Graduates (%)

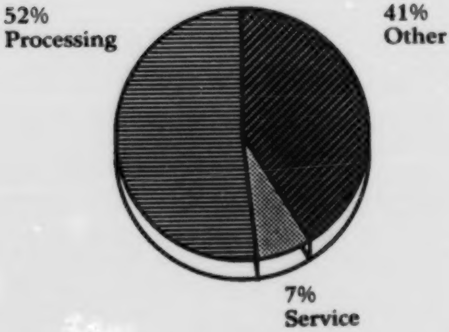


Food Processing Technologies

Trade Schools (6 months)

A large proportion of these graduates entered the labour force, where they had a slightly better chance than other graduates of finding a full-time job, mainly in processing and service occupations. Generally, these trade/vocational graduates reported an average level of job satisfaction, and few felt over-qualified for their current job.

Full-time Occupation of Graduates



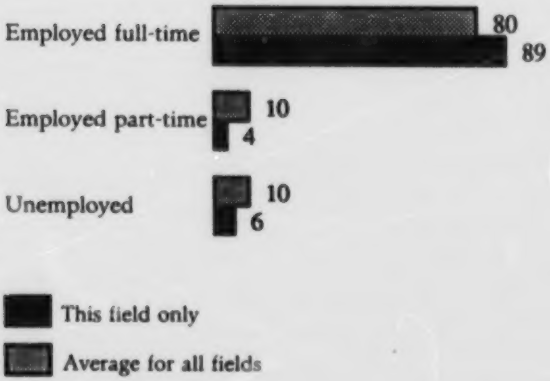
Forestry

University

- Undergraduate (4 years)
- Master's (3 years)

About 90% of the forestry undergraduates found full-time jobs related to the natural sciences, engineering and mathematics, especially in life science occupations. A greater-than-average proportion of master's graduates continued their education, but all those who looked for jobs, found them, mainly in the life sciences. More undergraduates than others considered themselves over-qualified for the job. Although most PhD graduates were satisfied with their jobs, did not feel over-qualified and thought their work matched their course of study, only an average proportion said they would take the same course again, perhaps because their average annual salary was almost $7,000 lower than the average for PhDs.

Destination of Graduates (%)

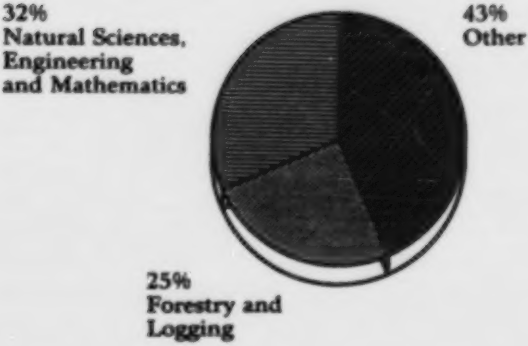


Forestry Technologies

Community College (2 years)

Upon graduation, a slightly lower-than-average proportion of these graduates entered the labour force. Their employment rate was average, although many found full-time employment, usually as life science technologists and technicians in the protective service (forest rangers) and forestry service industries. Forestry graduates were generally negative about their current job and the field of study, and most felt over-qualified for their job.

Full-time Occupation of Graduates

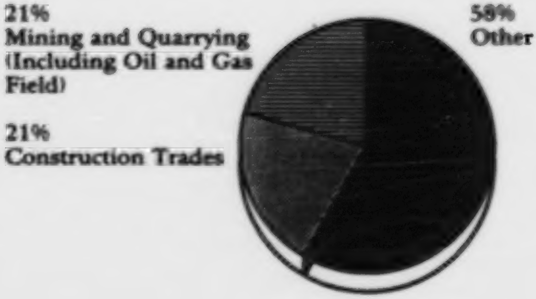


Other Primary Technologies

Trade Schools (5 months)

A higher-than-average proportion of these graduates entered the labour force, unfortunately with no great success. Even among those who did find jobs, there was a less-than-average chance of finding full-time employment. Of those employed full-time, most were working in mining and quarrying (oil and gas fields) as well as in the construction trades. Not only did these graduates have a high level of unemployment but were also unlikely to have jobs related to their training program.

Full-time Occupation of Graduates

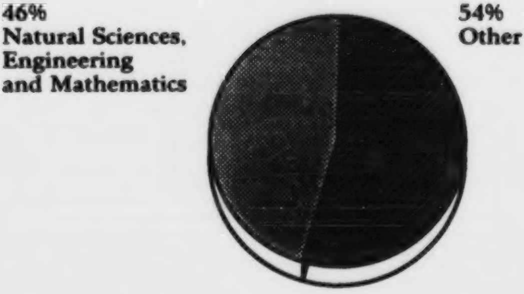


Other Primary Technologies

Community College (2 years)

A smaller proportion of graduates from this field than from other college fields of study entered the labour force, and an average proportion found jobs, mostly as engineering technologists and technicians in the crude petroleum and natural gas industry. Although the transition from school to work was as successful as for most other college graduates, many graduates in this field thought that their present job did not match the field of study and that they were over-qualified for their current employment. Only about 55% would make the same educational choice again.

Full-time Occupation of Graduates

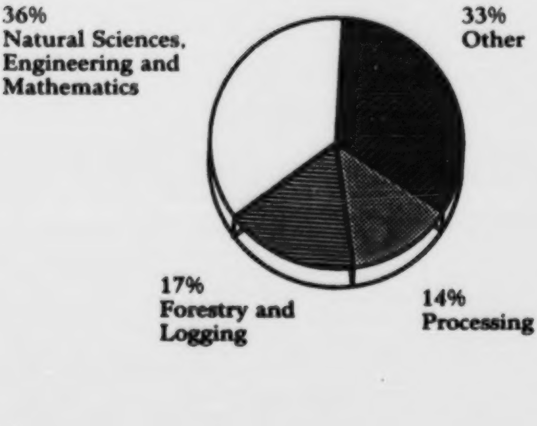


Resource Processing Technologies

Community College (2 years)

A larger proportion of graduates from this field than from other college fields of study looked for employment, but with no great success. Those who did find full-time jobs were employed mostly as life science technologists and technicians (agriculture, biology, fish and food) in provincial government or in the forestry service industry. Although the transition from school to work was relatively difficult, the graduates in this field were more positive about their jobs than other college graduates. Most thought their present job matched the field of study and were satisfied with it.

Full-time Occupation of Graduates



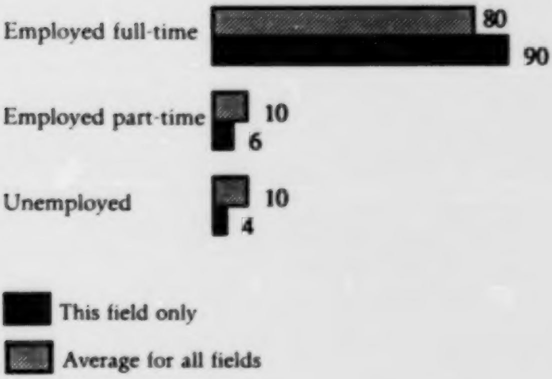
Veterinary Sciences and Medicine

University

- Undergraduate (4 years)

These graduates only had a 4% unemployment rate, even though a dramatically higher-than average proportion entered the labour force, almost all working as veterinarians, many establishing their own practice. In general, these graduates were more satisfied with their course of study than graduates from other fields. A significantly higher-than-average proportion stated they would make the same educational choice if they had to decide again.

Destination of Graduates (%)



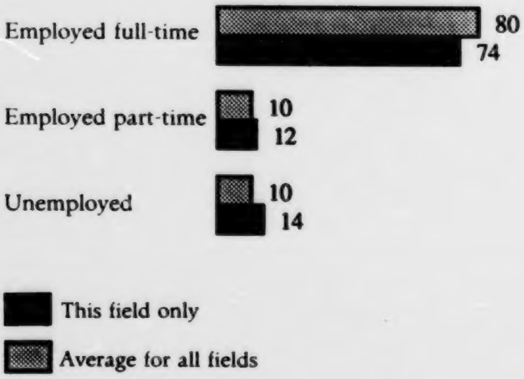
Chemistry

University

- Undergraduate (4 years)
- Master's (2 years)
- Doctorate (4 years)

Only 12% of those chemistry undergraduates who entered the labour force found work as chemists on graduation, and 28% worked in related occupations in the natural sciences. Master's graduates also had a higher-than-average unemployment rate (13%). Those who did find full-time jobs were working mostly as chemists for the federal government or in the business services industry. PhD graduates had about average success in the job market, working in the field of natural sciences or teaching at the university level. A good proportion of bachelor's graduates would not take the same course again, only an average proportion of PhDs and only 75% of master's graduates would choose the same course again.

Destination of Graduates (%)

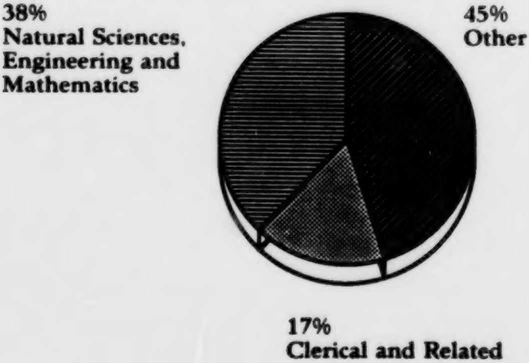


Computer Science

Trade Schools (12 months)

These graduates were quite successful in their job search, as the majority found full-time work, more than 30% as systems analysts and computer programmers. Another significant portion found work in clerical and related occupations, usually as electronic data-processing operators. In spite of their relatively favourable labour market experiences only about 65% of the graduates stated they would select the same program if they had to make that choice again. Computer science graduates from other levels reported a more favourable labour market outcome.

Full-time Occupation of Graduates

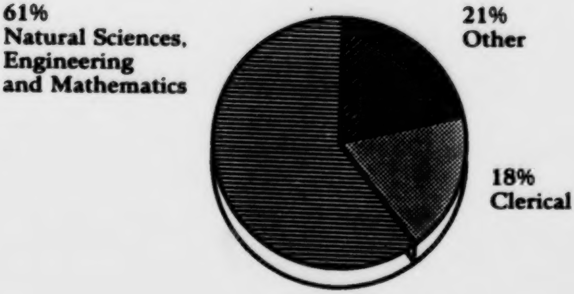


Computer Science

Community College (2 years)

Most of these graduates entered the labour force. Although the proportion who could not find work (10%) was about the same as the average in all college fields of study, a slightly larger proportion found full-time employment. They were employed mostly as systems analysts/computer programmers or as electronic data-processing equipment operators. In general, computer science graduates were more satisfied with their labour market outcome than other college graduates.

Full-time Occupation of Graduates



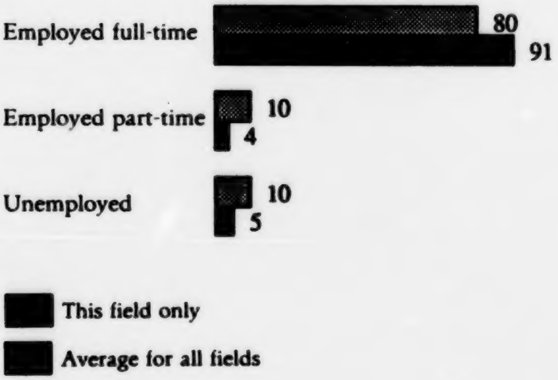
Computer Science

University

- Undergraduate (4 years)
- Master's (2 years)

The majority of undergraduates entered the labour force with greater success than other graduates, as reflected in their lower-than-average unemployment rate. A 1984 survey indicated that the majority were working full-time as systems analysts or in related occupations in the fields of natural sciences, engineering and mathematics. Master's graduates had an even lower unemployment rate (1%), working full-time mostly as systems analysts or programmers, or in management, administration or teaching. Both bachelor's and master's graduates in this field were more pleased than the average with their job and their course of study.

Destination of Graduates (%)



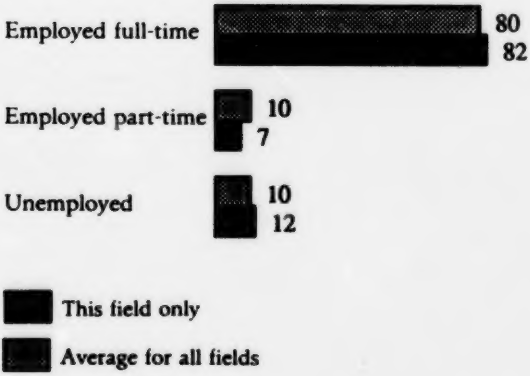
Geology

University

- Undergraduate (4 years)
- Master's (2 years)

An average proportion of geology undergraduates entered the labour market and were only slightly less successful than graduates from other fields, the majority finding jobs in the natural sciences and engineering, mostly as geologists. Those master's graduates who entered the labour market (a greater-than-average number did not) faced a 10% unemployment rate. They found work mainly as geologists. In general, bachelor's graduates were positive about their job and education; and about 90% of master's graduates would take the same course again, perhaps because of a high level of job satisfaction and higher-than-average annual salaries.

Destination of Graduates (%)



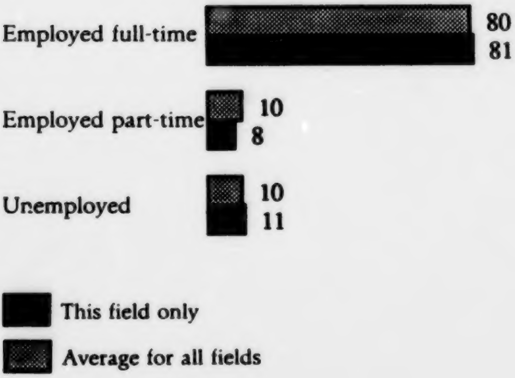
Mathematics

University

- Undergraduate (4 years)
- Master's (2 years)
- Doctorate (4 years)

A greater-than-average proportion of math undergraduates, master's and PhD graduates pursued their education upon completion of their program. Undergraduates who entered the labour force had average success, mostly in jobs related to computers and mathematics. Master's graduates had an unemployment rate of 12%, and PhDs also had a significantly higher unemployment rate than other doctorate graduates. Those master's graduates with jobs were mostly mathematicians, statisticians and actuaries, also teachers and systems analysts. Employed PhD graduates were almost all university teachers. An average proportion of undergraduates, and a slightly larger proportion of postgraduates would choose the same course again.

Destination of Graduates (%)



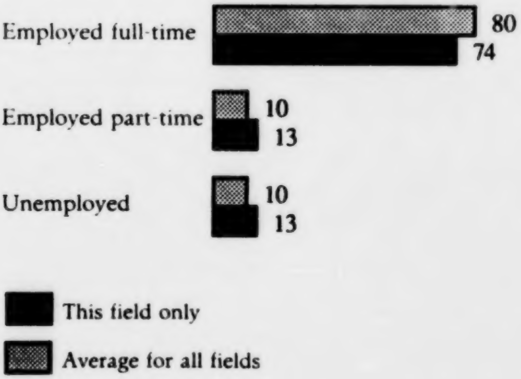
Physics

University

- Undergraduate (4 years)
- Master's (2 years)
- Doctorate (4 years)

The unemployment rate for physics undergraduates was higher than in other fields; those with jobs were mainly in the natural sciences, engineering and mathematics. Master's graduates had about an average unemployment rate, finding work mainly as systems analysts, computer programmers or in the life sciences, business services or defence industries. PhD graduates had a low unemployment rate. One in every four was either a physicist or a university teacher. Given the poor labour market conditions faced by undergraduates in this field, it is not surprising that a lower-than-average proportion would choose the same course again. Graduates at the master's and doctorate levels, however, were more positive.

Destination of Graduates (%)



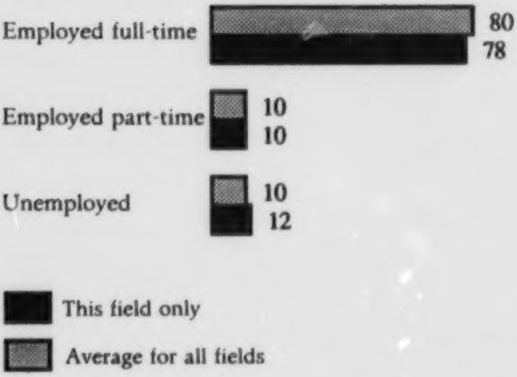
Economics

University

- Undergraduate (3 years)
- Master's (2 years)
- Doctorate (4 years)

Economics undergraduates had about an average success rate finding jobs, but only a small number as economists. Master's graduates faced a 14% unemployment rate. Those working full-time two years after graduation were nearly all economists with the federal or provincial governments. All PhD graduates entered the work force (many were already working and studying part-time), and 90% found full-time work either as university teachers or in management and administration. Less than the average of all three levels of graduates would choose the same course again, although the postgraduates were more likely than the undergraduates to find jobs that matched their studies.

Destination of Graduates (%)



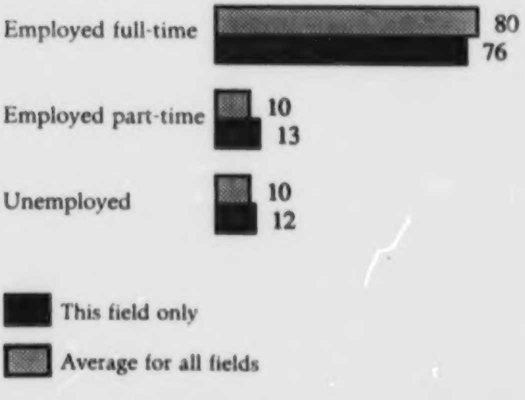
Geography

University

- Undergraduate (3 years)
- Master's (2 years)
- Doctorate (5 years)

Geography undergraduates had average success in the labour market, finding jobs, not necessarily all related to their course of study. Many were working in management and administration, the natural sciences and teaching. Master's and doctorate graduates were more successful in finding jobs related to their program of study. Master's graduates, who had a less-than-average success rate in finding jobs, were working in natural sciences, engineering and mathematics, including community planning. All PhD graduates found jobs, 84% as university teachers. A dramatically-lower-than-average proportion of bachelor's graduates would select the same program of study again (this was the lowest value reported at the undergraduate level). Only a low proportion of master's graduates would take the same course again, but PhD graduates were more content with their course of study.

Destination of Graduates (%)



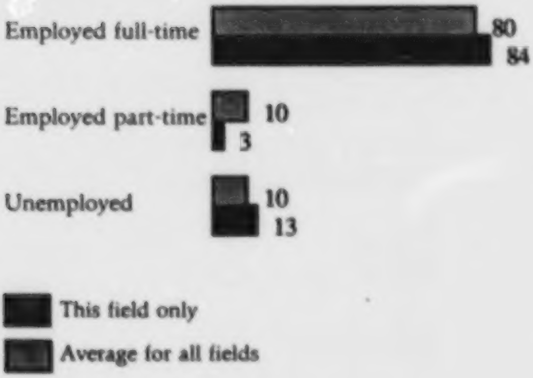
Law

University

- Undergraduate (3 years)

The complexity of today's society and laws has made the taking of double degrees, such as law and business, a prudent career move. Roughly 60% of law graduates were in the labour force two years after graduation, 15% unemployed. About 98% of full-time employed law graduates were self-employed (in private practice). Because of the specific focus of their training, most graduates work as lawyers or notaries, while a few enter management occupations. In general, LLB graduates were more satisfied with their course of study than other bachelor's graduates.

Destination of Graduates (%)



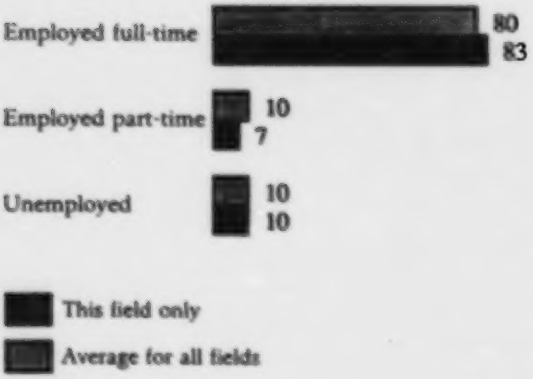
Planning and Resource Management

University

- Undergraduate (4 years)
- Master's (2 years)

About 90% of those undergraduates looking for work, found jobs, many in management and administration or in occupations such as community planner. A very large proportion of master's graduates entered the work force where they had average success, working mainly as community planners in local government. Although their unemployment rate was about average, bachelor's graduates experienced a labour market outcome that was less favourable than average. They were less likely to find work related to their studies. Master's graduates also expressed misgivings; many were disatisfied with their jobs, and only about 60% said that they would take the same course again.

Destination of Graduates (%)



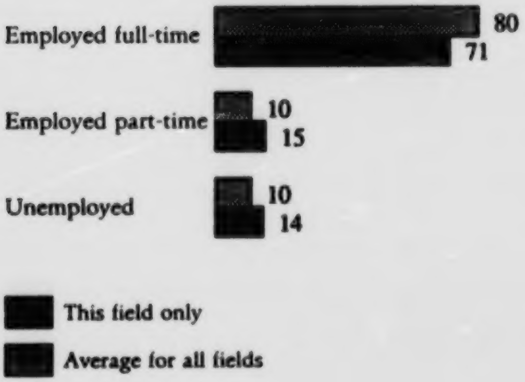
Political Science

University

- Undergraduate (3 years)
- Master's (2 years)
- Doctorate (4 years)

Those undergraduates who looked for work on graduation had more difficulty finding a full-time job than other graduates at the same level. Those who were successful, were working in management and administration, the social sciences, clerical work and sales. The success of master's graduates in the labour market was lower than for other master's graduates. All PhD graduates found either full- or part-time work, almost all as university teachers. A dramatically lower-than-average proportion of bachelor's graduates thought their job was related to the program of study, and a lower-than-average number were satisfied with their job. Master's and doctorate degree recipients in political science had a relatively better labour market outcome.

Destination of Graduates (%)

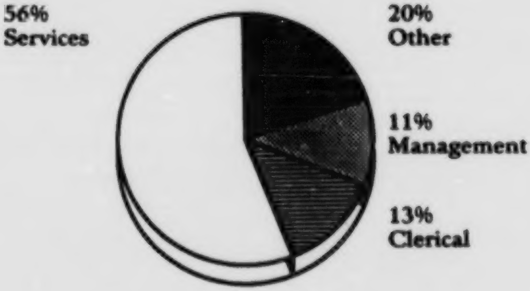


Protection and Correction Services

Community College (2 years)

Roughly 10% of these graduates continued their formal education; those who entered the work force were mainly employed as police officers and detectives (government) and as guards and related security workers in the protective services industry. The transition from school to work for these graduates was slightly worse than for other graduates; many felt that their job did not match their field of study and that they were over-qualified for their job.

Full-time Occupation of Graduates



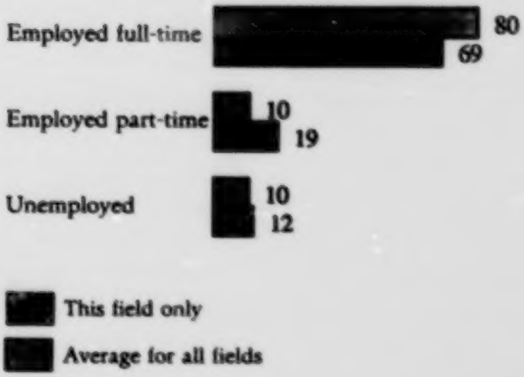
Psychology

University

- Undergraduate (3 years)
- Master's (2 years)
- Doctorate (4 years)

Roughly 75% of psychology bachelor's graduates were in the labour force (including those enrolled part-time), where they had more problems finding full-time work than other graduates at this level. Those who did find jobs were mostly teachers at the elementary and kindergarten levels. Some were working in the social sciences, management and administration. Those master's graduates who entered the work force (less successfully than other graduates at this level), found jobs mainly as psychologists in hospitals and schools. Unemployment among the PhD graduates was almost non-existent; the majority were psychologists, many were university teachers. Bachelor's graduates reported an average level of job satisfaction. Graduates at the master's and doctorate levels reported relatively better labour market outcomes.

Destination of Graduates (%)

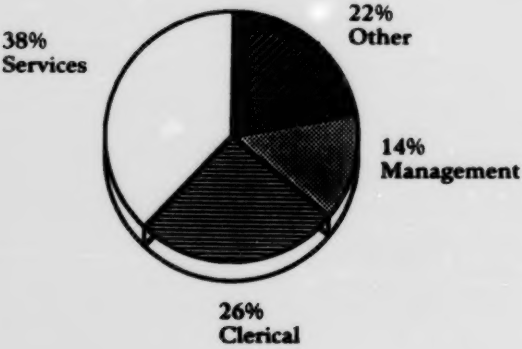


Service Industries Technologies

Community College (2 years)

Upon graduation, slightly more of these graduates than other college graduates continued their education, and fewer entered the labour force. A smaller proportion than average were unable to find a job (an 8% unemployment rate), finding work mainly in the food and beverage service industry. Although a greater-than-average proportion of these graduates were satisfied with their current job, only about 55% would follow the same educational route if they had to choose again.

Full-time Occupation of Graduates

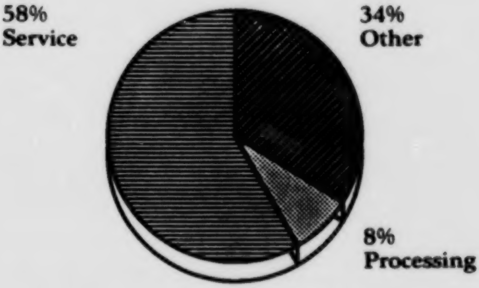


Service Industries Technologies (Cooking)

Trade Schools (9 months)

Graduates from this program faced a difficult situation in the labour market. They entered the labour force in a proportion comparable with that in other fields, but they were significantly less successful in finding a job. Those who did were employed mostly in service occupations, especially as chefs and cooks. Others found jobs in processing occupations. Generally, full-time employed graduates were reasonably satisfied. However, college graduates in related fields fared better in the labour market, as indicated by their lower unemployment rate.

Full-time Occupation of Graduates

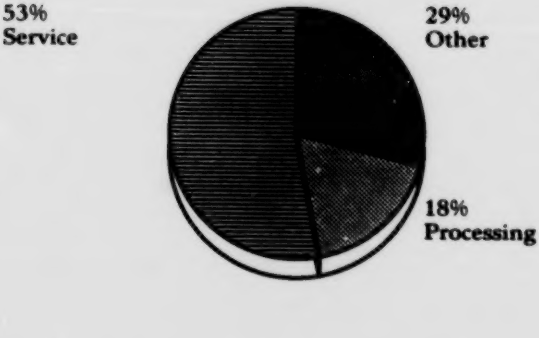


Service Industries Technologies (Other Food Preparation)

Trade Schools (7 months)

An average proportion of graduates from this field of study entered the labour force but were not as successful as other graduates in finding work. Most of the graduates who were employed two years after graduation were working in service occupations, which include chef and cook positions or processing occupations. They were, for the most part, satisfied with their job, although a significantly higher-than-average proportion believed they were overqualified for it.

Full-time Occupation of Graduates

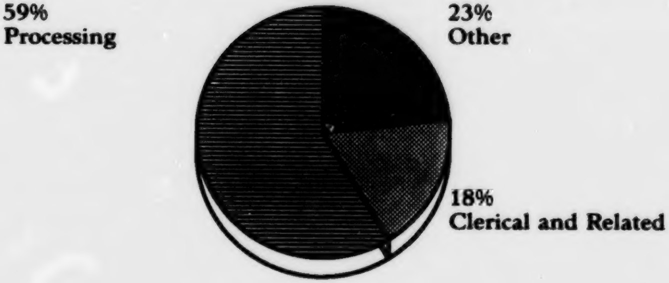


Service Industries Technologies (Other)

Trade Schools (7 months)

A greater-than-average proportion of graduates entered the labour force but were not as successful as other graduates in their job search. A greater-than-average proportion could not find a job and fewer of them than other graduates found full-time work. Of those working full-time two years after graduation, most were employed in processing occupations, especially in the area of food and beverage serving. Some found jobs in clerical and related occupations. Although many of these graduates were likely to remain unemployed, 65% stated they would be ready to take the same educational program again.

Full-time Occupation of Graduates

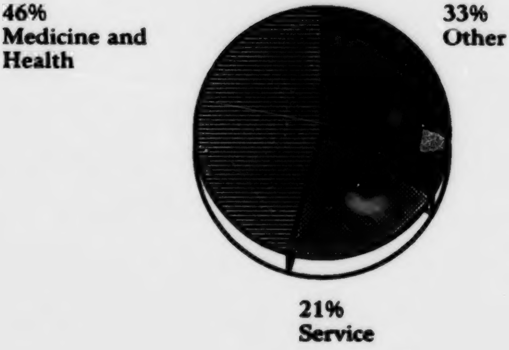


Social Services

Trade Schools (7 months)

A greater-than-average proportion of these graduates could not find a job and they were less likely to find full-time work than graduates from other fields. Of those who were employed full-time two years after graduation, close to one half were working as nursing attendants, while others had entered service occupations. In comparison with graduates from other fields at this level, social services graduates who found full-time employment were much more likely to have a job related to their course of study, to be satisfied with their job and to not think they were over-qualified for it.

Full-time Occupation of Graduates

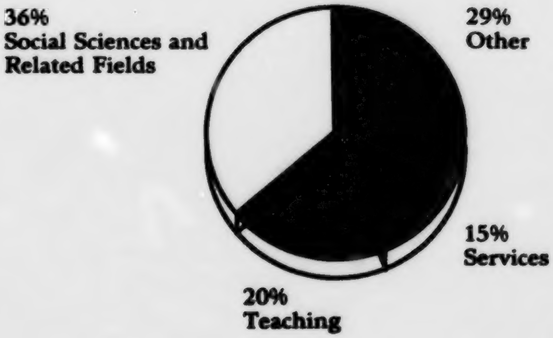


Social Services

Community College (2 years)

Graduates from this program experienced a labour market outcome similar to the average for all college fields of study. The majority were working full-time as social workers, welfare and community services workers, child care workers and teachers of exceptional students in day-care centres, nursery schools, institutional health and social services and hospitals. A very high proportion of these graduates were satisfied with their job.

Full-time Occupation of Graduates



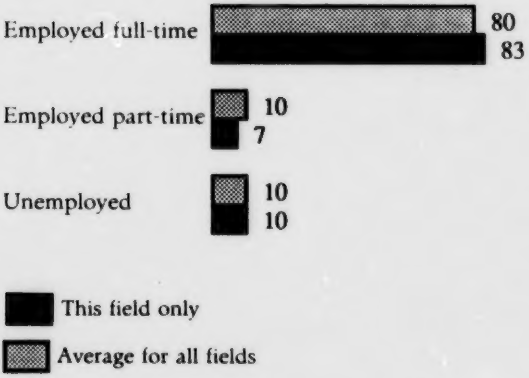
Social Work and Social Welfare

University

- Undergraduate (3 years)
- Master's (2 years)

A large proportion of bachelor's graduates entered the labour force, where they had average success, finding work mainly as social workers and in other occupations in the social sciences. Master's graduates fared better, with only a 2% unemployment rate. Most were employed as social workers in the non-institutional or hospital sectors of the economy. Both levels of graduates faced favourable labour market conditions, and were satisfied with their jobs. About 85% of master's graduates said they would take the same course if they had to make the choice again.

Destination of Graduates (%)



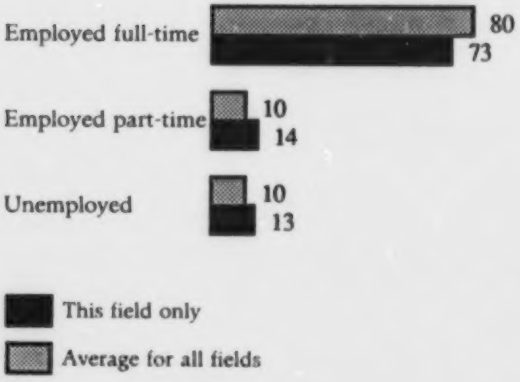
Sociology

University

- Undergraduate (3 years)
- Master's (2 years)
- Doctorate (4 years)

Close to 80% of undergraduates in sociology were in the labour force upon completion of their program (including those studying part-time in their final semester). Those who looked for jobs were slightly less successful than other graduates, finding work in management, administration, teaching and clerical areas, rather than in social science. Master's graduates had a 12% unemployment rate which would have been even higher, had not 14% of these graduates been working part-time. Those with jobs were mainly in the social sciences, some in teaching. PhD graduates were not as successful at finding work as other graduates at this level. Those who did, were mainly teaching at universities. Employment indicators were more pessimistic than the average for all sociology graduates.

Destination of Graduates (%)



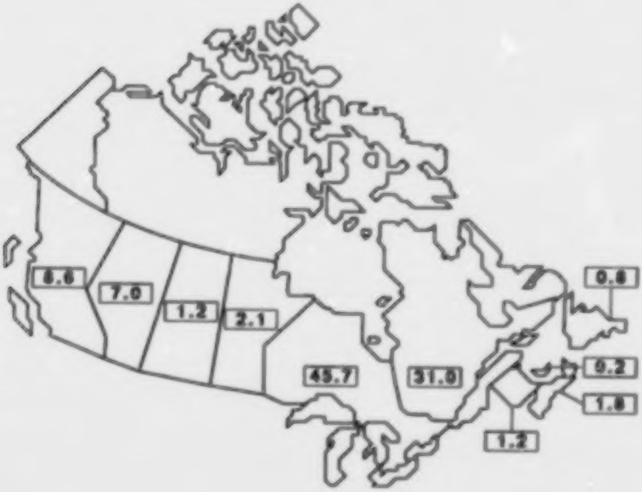
Occupational Outlooks

1130 General Managers

Typical occupations: presidents, vice-presidents, chairpersons, directors, executive directors

The current job market for this group is better than for most occupations, with low unemployment among experienced executives. Between 1987 and 1995, 10,000 new jobs are anticipated, with another 36,000 jobs opening up to replace people leaving the occupation. In spite of this, competition for executive posts is expected to intensify as the labour force ages, and the number of qualified and experienced managers increases. New technology, which tends to reduce the need for large work forces, may have a minor effect on the demand for this occupational group.

Geographic Distribution of Employment – 1981 (%)

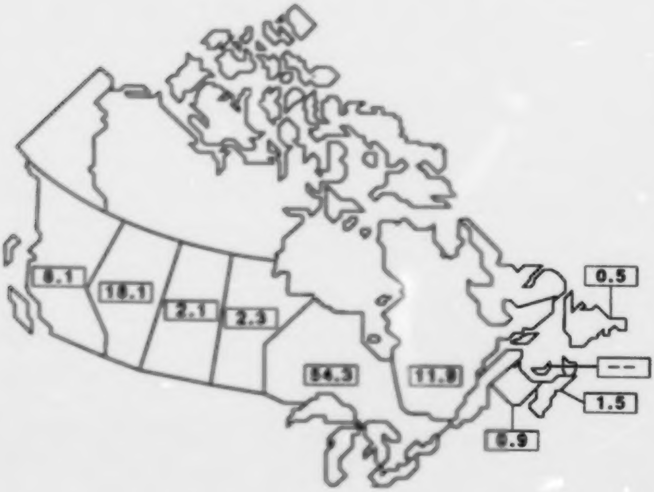


1131 Management in Natural Sciences and Engineering

Typical occupations: managerial and administrative positions in architecture, data processing and system analysis, engineering, the life sciences and physical sciences

There is expected to be about average employment growth in this area over the next eight years, with about 3,400 replacement jobs coming vacant. Within this group, data-processing and systems analysts should have good job prospects as the micro-computer industry continues to grow, creating new organization roles. And the importance placed on science and engineering in our society will create a greater demand for managers with technical expertise.

Geographic Distribution of Employment – 1981 (%)

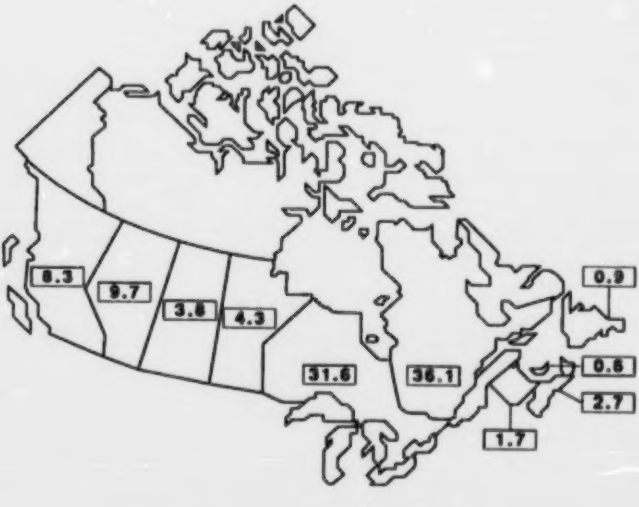


1132 Management in the Social Sciences

Typical occupations: art gallery managers, community centre directors, museum directors, welfare agency officials, welfare managers

Projected employment growth for this occupational group is about average, with about 1,100 new jobs and 2,100 additional replacement openings anticipated during the next eight years. The growing number of qualified, experienced workers, the trend toward hiring better educated personnel, and the increasing importance of preventative measures in fields such as clinical sociology, criminology and environmental sociology will affect job opportunities. People with administrative and business qualifications in addition to their social science specialties will have an advantage in the labour market.

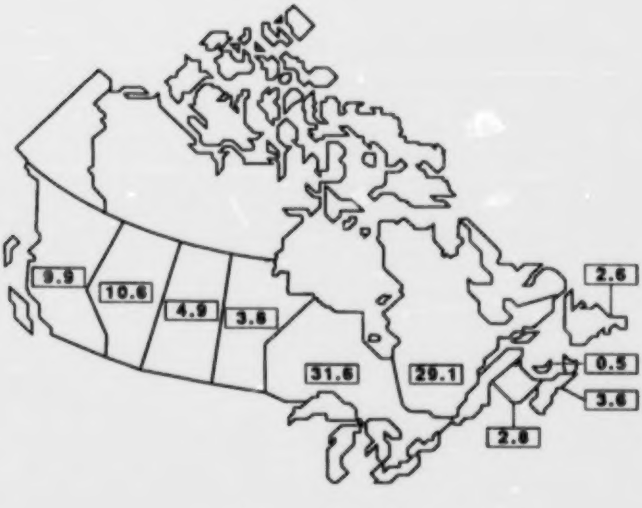
Geographic Distribution of Employment – 1981 (%)



1133 Administrators in Teaching

About average employment growth is expected over the next eight years for this group. Jobs are affected by student/teacher ratios and federal/provincial spending on education. Over the next eight years, 3,600 new teaching administration jobs and 15,500 replacement opportunities are expected. Current labour market conditions suggest that unemployment is extremely low for this group. However, competition for administrative positions remains intense among secondary and elementary school teachers.

Geographic Distribution of Employment - 1981 (%)

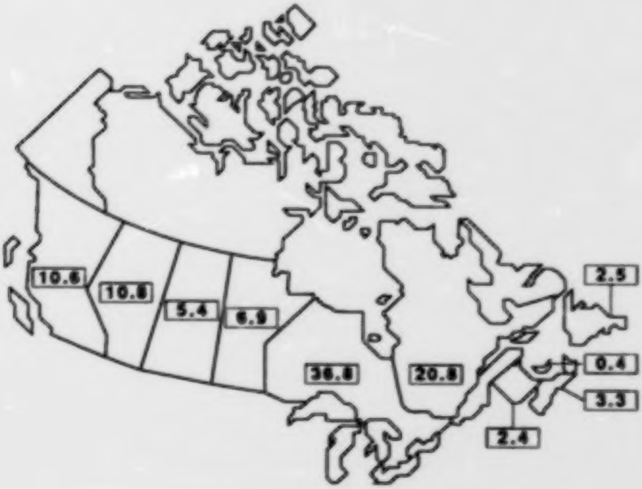


1134 Administrators in Medicine and Health

Typical occupations: hospital administrators, chief dieticians, and directors of occupational health, public health, therapeutic services, volunteer services and admitting departments

The number of jobs in this area is expected to increase more slowly than the average rate of all occupations, over the forecast period. As the use and cost of health care increases, managers/administrators will be required to monitor and control expenditures and consult on hospital facilities. If the current trend of hiring contract managers at some hospitals increases, there may be more job opportunities with contracting firms. The shift towards chronic care facilities, day surgery, home care and day care may increase demand for personnel to administer these programs.

Geographic Distribution of Employment – 1981 (%)

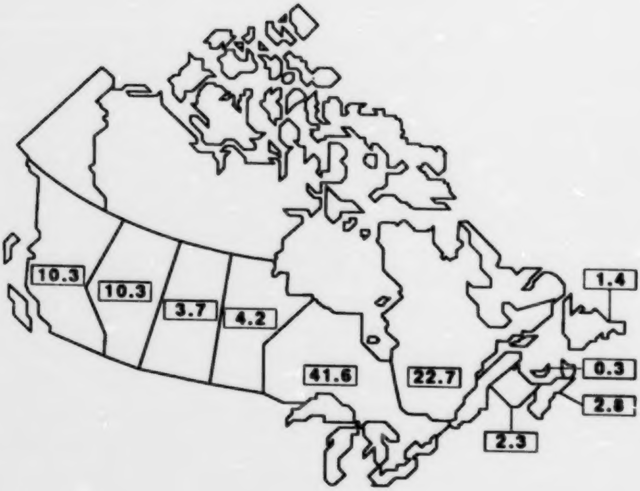


1135 Financial Management

Typical occupations: bank directors, branch managers, loan managers, controllers, vice-presidents of finance

Employment growth in this occupational group should be about the same as for the labour market in general, with about 7,000 new jobs and 16,000 replacement jobs forecast over the next eight years. Deregulation of the financial sector and the greater number of institutions licensed to provide monetary transactions both have increased the demand for these managers. Prospects are particularly good for credit managers and candidates who have specialized in commerce and computer science.

Geographic Distribution of Employment – 1981 (%)

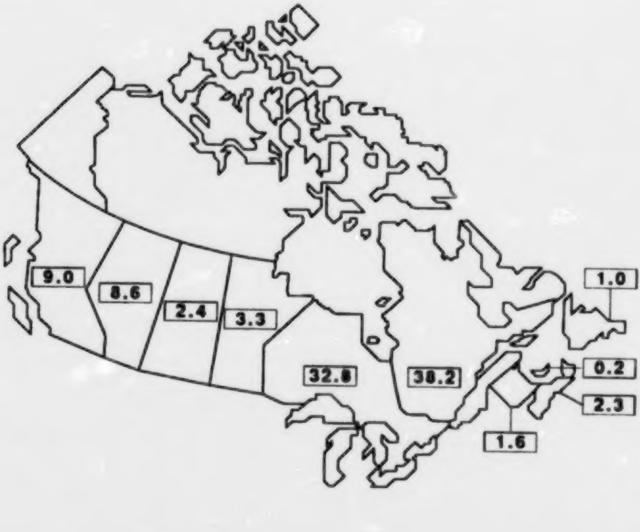


1136 Personnel and Industrial Relations Management

Typical occupations: employee relations managers, personnel department managers, industrial relations directors, recreation directors

The forecast is for about average growth of employment in these occupations over the next eight years, with about 2,800 new jobs and 8,000 replacement jobs forecast. Although very sensitive to a downturn in the economy, these occupations will be affected by present concerns for leaner organizations. Production rationalizations, layoffs and redeployment of staff may increase demand for personnel managers and may alter the skills and knowledge needed to accompany changing technology in the workplace.

Geographic Distribution of Employment – 1981 (%)

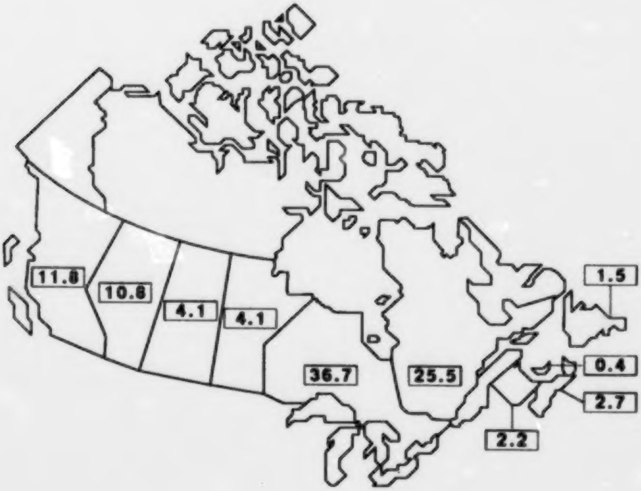


1137 Sales and Advertising Management

Typical occupations: advertising managers, advertising directors, marketing managers, retail store managers, retail department managers

The employment outlook for this occupational group calls for about average growth into the mid-1990s, with about 24,000 replacement job openings in addition to 17,500 new jobs anticipated. A considerable proportion of sales managerial jobs are in retail and wholesale trade, with secondary concentrations in the manufacturing and services sectors. Employment in these sectors is fairly stable through business cycles and throughout the year.

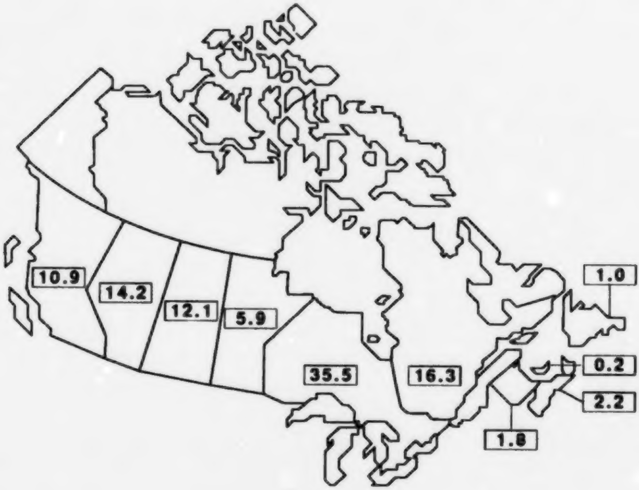
Geographic Distribution of Employment - 1981 (%)



1141 Purchasing Management

The outlook for these occupations calls for below-average growth over the next eight years, with the creation of 1,300 new jobs and about 5,300 replacement jobs. As computers simplify administrative tasks such as controlling inventory and record-keeping, emphasis will be on negotiating skills and supplier performance aspects of purchasing. Opportunities should be better for those managers who are computer-competent, with university degrees, a Professional Purchaser designation and strong interpersonal skills.

Geographic Distribution of Employment – 1981 (%)

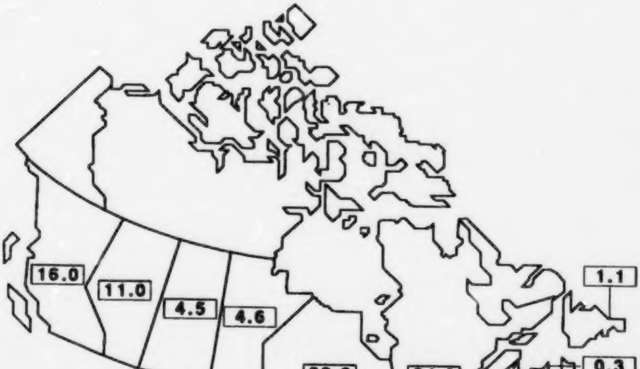


1142 Services Management

Typical occupations: club and lodge directors, restaurant managers, hotel and motel operators

Employment of service managers will increase much faster than the average of all occupations over the next eight years. Replacement openings will provide most jobs in the hospitality sector. During recessions, job losses in these occupations should be relatively few, while general economic growth will increase demand as businesses require conferencing and accommodation facilities.

Geographic Distribution of Employment - 1981 (%)

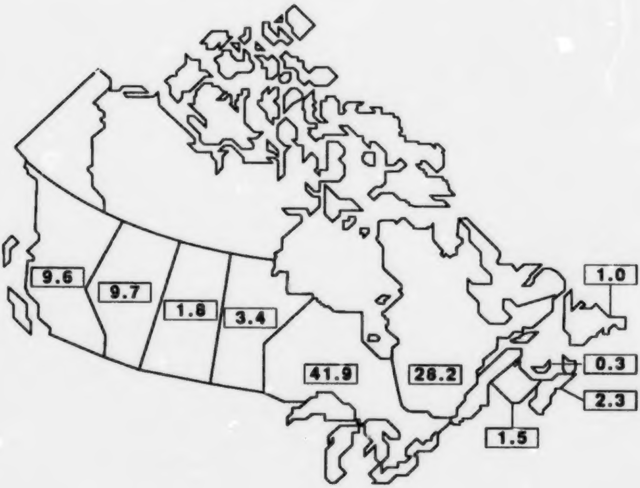


1143 Production Management

Typical occupations: factory superintendents, field directors, operation managers, refinery superintendents, production managers

The employment outlook in these occupations calls for below-average growth over the next eight years, with about 4,300 new jobs and another 16,800 replacement openings forecast. Since these occupations are susceptible to economic conditions, unemployment among managers in the goods-producing industries may rise in periods of recession. On the whole, the new computer technology should reinforce employment growth in this field.

Geographic Distribution of Employment - 1981 (%)

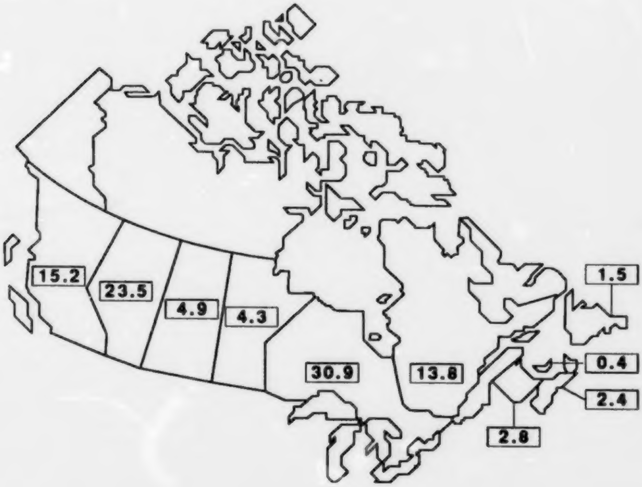


1145 Construction Operations Management

Typical occupations: development managers, project managers, construction managers, construction superintendents, road commissioners

Into the mid-1990s, employment growth for this group will exceed the overall average. It is anticipated that some 13,400 additional workers will be needed to replace departing personnel. The labour market situation for this occupation, as reflected by the unemployment rate among construction managers, has been slightly better than for most occupations.

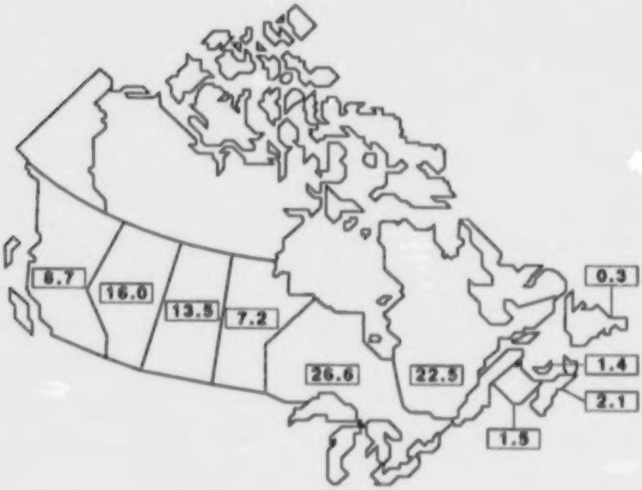
Geographic Distribution of Employment – 1981 (%)



1146 Farm Management

The employment outlook for farm managers calls for about average growth into the mid-1990s, with about 3,200 new jobs and about 18,000 replacement jobs expected. Technological advances (sometimes knows as "agrimation"), such as computerized systems to regulate feeding, planting and harvesting, and the use of robotics for harvesting field and orchard crops, may change farm structures. These developments will probably reduce farm worker employment which, in turn, may limit opportunities for farm managers. The outlook for managers with a wide range of scientific, business and personnel management skills is promising, but opportunities are limited to the larger farms.

Geographic Distribution of Employment – 1981 (%)

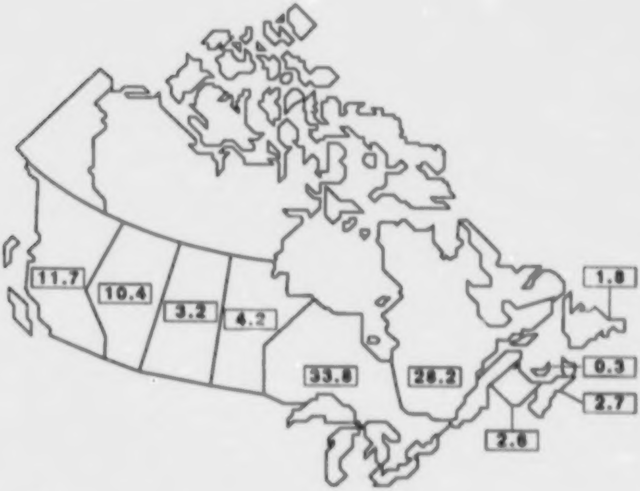


1147 Transport and Communications Operations Management

Typical occupations: airline managers, traffic managers, flight directors, port engineers

The employment outlook for this classification calls for below-average growth through to the mid-1990s, with about 800 new jobs and 5,600 replacement jobs expected. At present, the desirable recruit is a generalist with business, technical and interpersonal skills, who can apply communications technology to the business needs of the company.

Geographic Distribution of Employment – 1981 (%)

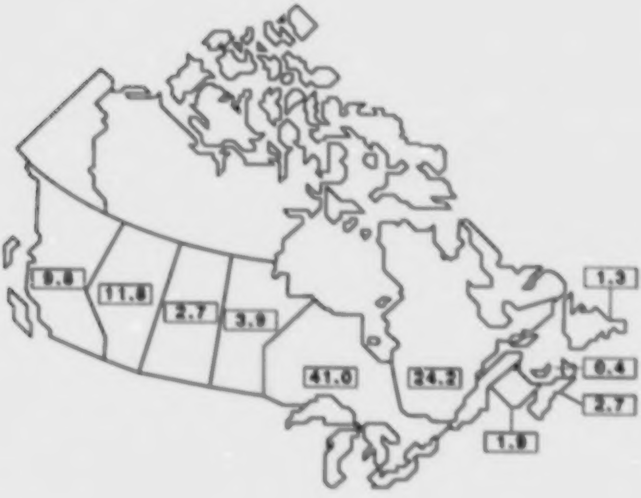


1171 Accountants and Auditors

Typical occupations: accountants, auditors, underwriters, tax consultants, loan advisors

Over the next eight years, employment growth is expected to be average: some 66,000 jobs will result from individuals withdrawing from the labour force, and there will be approximately 18,800 new job openings. New technology has had a profound effect on insurance and finance: overall its impact has been positive and promotes these professionals, who engage in long-range planning and management information services. Opportunities should be better for those familiar with computerized banking and investment systems.

Geographic Distribution of Employment – 1981 (%)

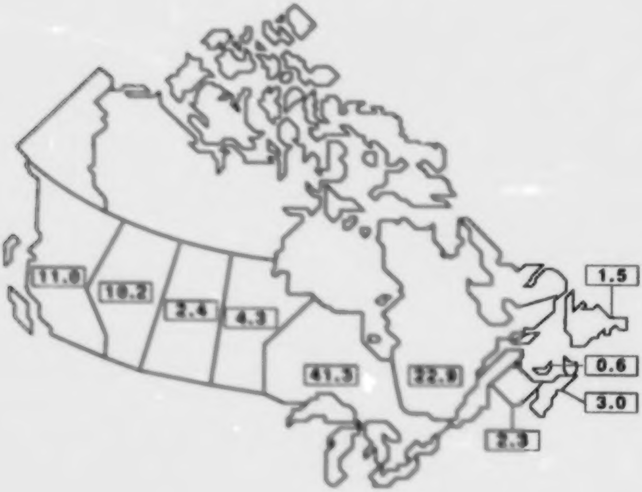


1174 Personnel Officers

Typical occupations: personnel assistants, employee relations specialists, industrial relations officers, employment counsellors

For the next eight years, the employment growth rate for these occupations should be very close to the overall average in the labour market, with about 21,000 new jobs in total. More sophisticated and extensive human resource planning in industry is partly responsible for the optimistic outlook. Unemployment is quite low compared to most other occupations. Employment of personnel administrators tends to be exceptionally stable. Apart from employment counsellors, who are concentrated in public administration, personnel officers are widely distributed across all industries.

Geographic Distribution of Employment – 1981 (%)

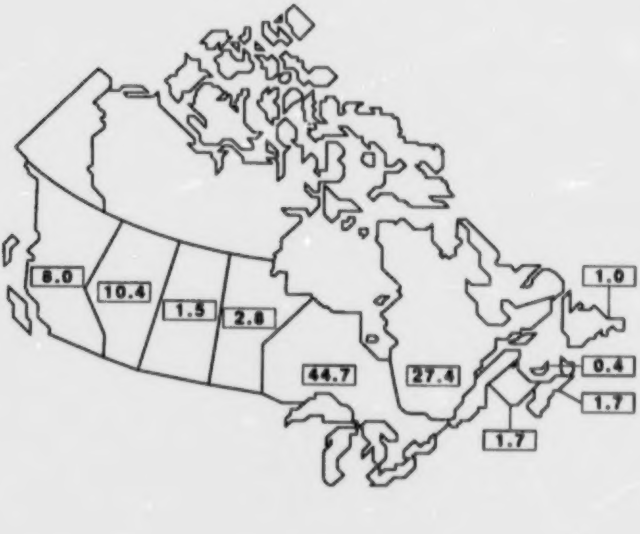


1175 Purchasing Officers and Buyers

Typical occupations: field contractors, procurement officers, purchasing managers

Projections to 1995 call for about average employment growth, with about 1,700 new purchasing positions and 8,000 replacement openings occuring over the next eight years. Employment in these occupations tends to be quite stable, little seasonal variation throughout the year and nearly all full-time work. Jobs are, however, vulnerable to changes in the business climate, especially to conditions affecting manufacturing where most purchasers are employed.

Geographic Distribution of Employment – 1981 (%)

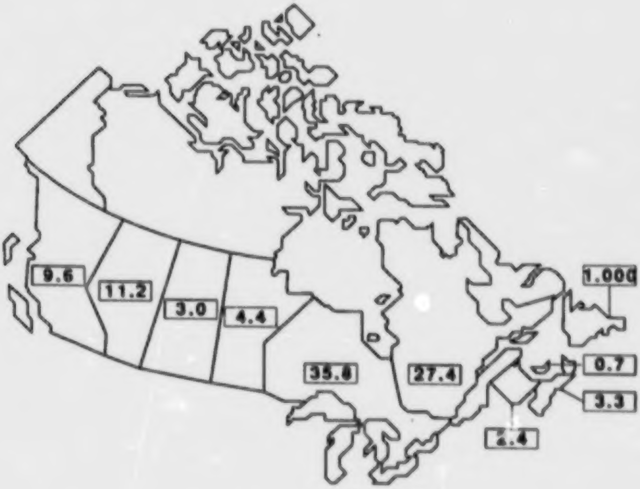


1176 Inspectors and Regulatory Officers

Typical occupations: beauty salon inspectors, boiler inspectors, mine inspectors, railroad inspectors, restaurant inspectors, ship inspectors

Employment growth in these occupations has been above average over the past decade, and although projections call for a slowdown in employment, these occupations should still expand at a slightly faster-than-average rate into the mid-1990s. About 800 new job openings and 3,200 replacement openings are expected over the next eight years. Conditions for inspecting occupations are among the most favourable in the labour market, with fairly low unemployment.

Geographic Distribution of Employment – 1981 (%)

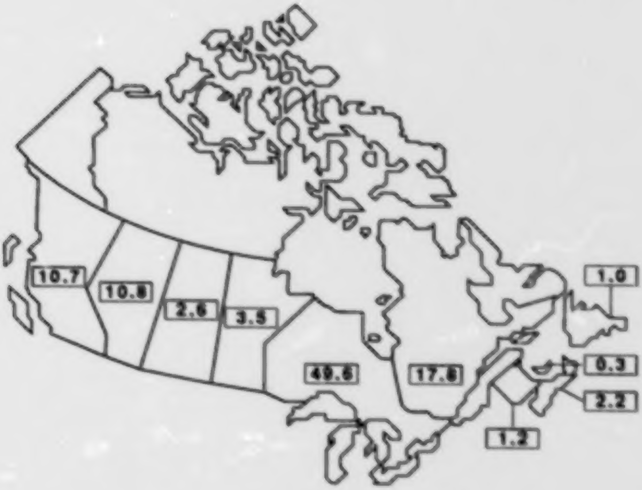


1179 Management and Administration

Typical occupations: public relations officers, information officers, business consultants, promoters, business agents, publicity agents, contract agents

Approximately 6,500 new jobs are expected over the next eight years in this area. Current labour market conditions for these occupations are on a par with the labour market at large. Employment is stable, usually full-time, with no seasonal variation. These occupations are not very susceptible to changes in general business conditions.

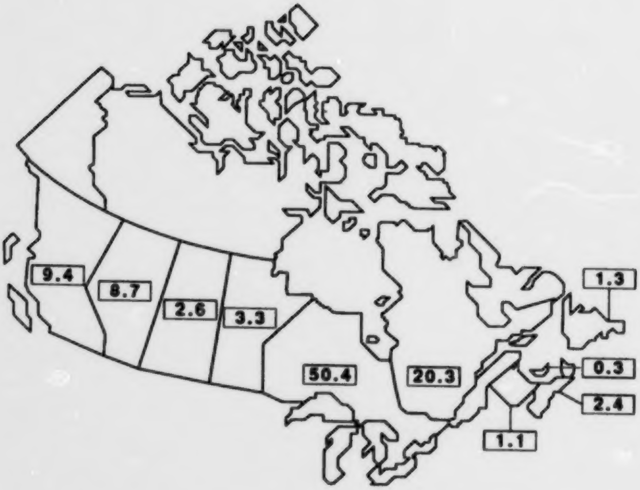
Geographic Distribution of Employment - 1981 (%)



2111 Chemists

Current unemployment rates for chemists are much lower than the average for all occupations, with a higher-than-average rate of hard-to-fill vacancies. The chemistry field is not as susceptible to changing business conditions as other occupations: employment is stable year-round and mostly full-time. During the next eight years, the employment growth for chemists should be about average, with approximately 900 new jobs and 4,000 replacement jobs opening up.

Geographic Distribution of Employment – 1981 (%)

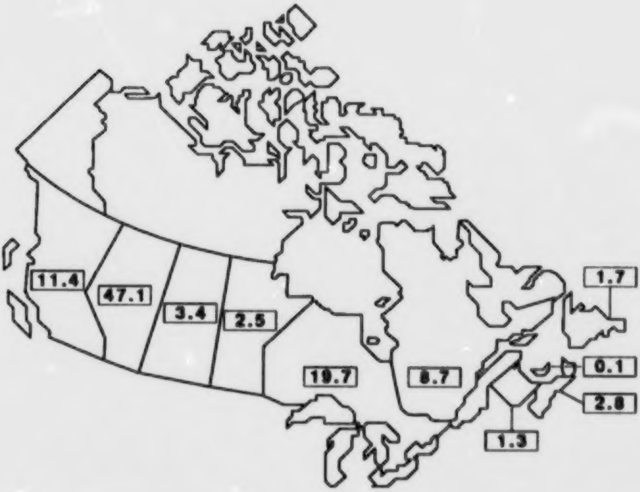


2112 Geologists

Typical occupations: geochemists, geophysicists, hydrologists, mineralogists, oceanographers, seismologists

Since geologists work mainly in mining, the petroleum industries, business services and services incidental to mining, current depressed prices for mining commodities and lower world oil prices are adversely affecting jobs. However, projections call for above-average employment growth for this occupation, with 850 new jobs and 2,600 replacement jobs expected over the next eight years. Deep-sea exploration and research should continue to support the demand for oceanographers. And mounting concern for the environment will increase the demand for engineering and environmental geologists.

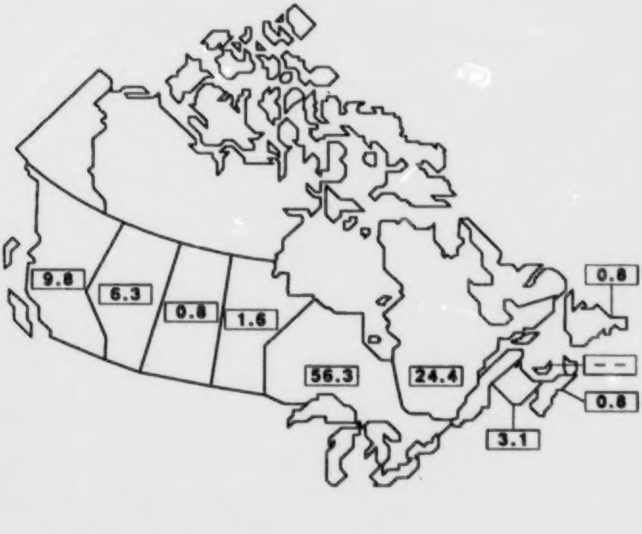
Geographic Distribution of Employment – 1981 (%)



2113 Physicists

Employment growth for physicists is expected to remain about average into 1995; job openings occur as individuals move into managerial and administrative occupations. At present, the Canadian Association of Physicists has a membership of 1,700. Employment of physicists is not strongly affected by economic fluctuations but can be sensitive to government funding of research. Job opportunities in the public sector and in colleges and universities may be limited, but should be better in the business and scientific services sector where steady growth is projected.

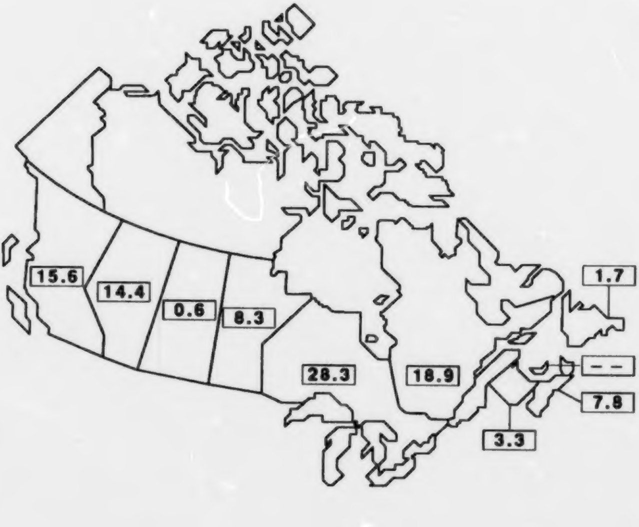
Geographic Distribution of Employment - 1981 (%)



2114 Meteorologists

Employment growth for meteorologists will probably be slightly slower than the overall average. Job openings will occur mainly to replace those meteorologists leaving the work force. Most graduates will have no difficulty finding jobs, but there will be a greater demand for those with a high degree of skill and knowledge in their area. Over 80% of meteorologists work for federal or provincial governments, while business services account for a minor share of positions. If government spending continues to decrease in this area, job openings in the public sector will be limited, but increasing use of subcontractors and external services may stimulate job prospects in business services.

Geographic Distribution of Employment – 1981 (%)

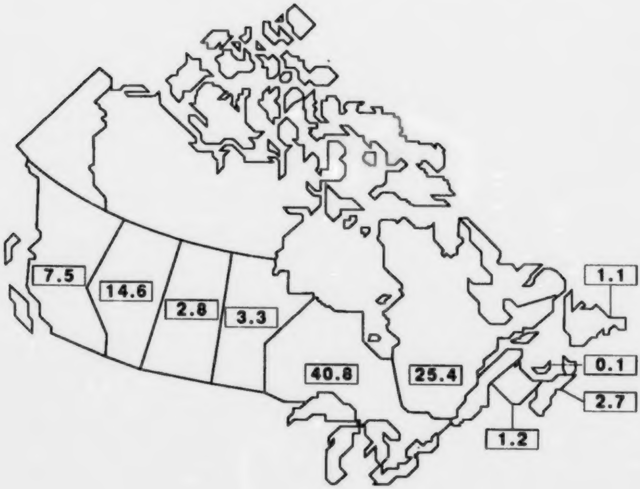


2117 Physical Sciences Technologists and Technicians

Typical occupations: ballistics technicians, chemical laboratory analysts, food technologists, geophysical technicians, water-purification technicians

Over the next eight years, about 1,900 new jobs are anticipated in these fields, as employment growth should approximate the overall average in the labour market. Business services, chemicals and chemical products industries, and federal administration are the largest employers of technicians and technologists. Steady employment increases are expected. The continued demand for goods containing chemical products, particularly non-agricultural chemicals, will probably create jobs.

Geographic Distribution of Employment – 1981 (%)

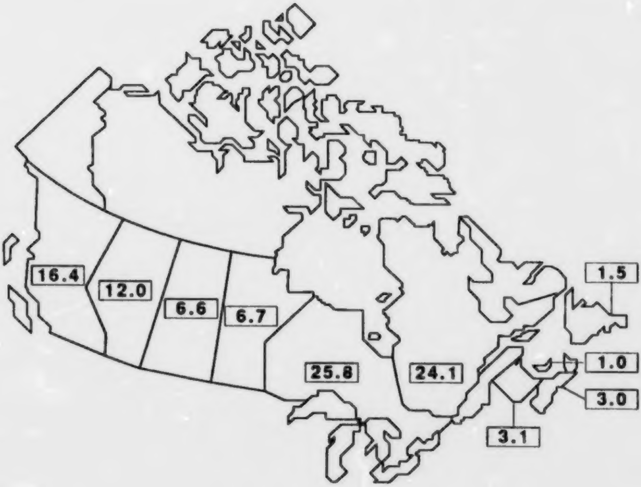


2131 Agriculturalists

Typical occupations: agrologists, agronomists, horticulturalists, soil scientists, agricultural economists

Employment growth for this cluster of occupations will probably be below average. The relatively young age structure indicates that they offer mostly entry-level positions to new graduates: openings will occur mainly as replacements are needed for those scientists leaving the work force. Job prospects are good for agricultural scientists involved in biotechnical research applications. And demand will likely increase for highly skilled researchers with expertise in related disciplines and an understanding of computers.

Geographic Distribution of Employment – 1981 (%)

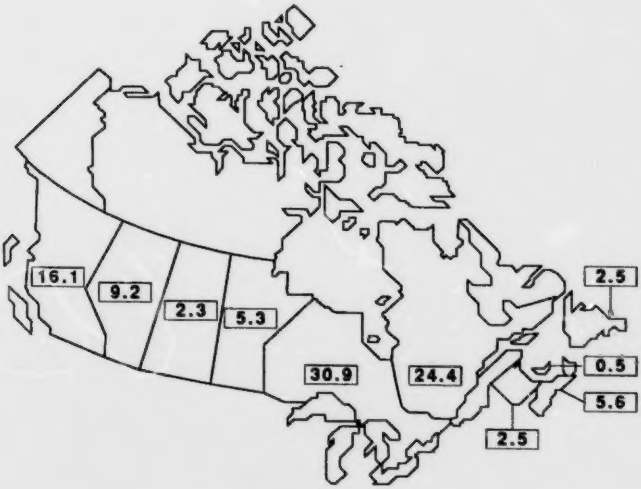


2133 Biologists

Typical occupations: anatomists, biochemists, ecologists, geneticists, medical bacteriologists, microbiologists, neurobiologists, pathologists, pharmacologists, zoologists

Over the next eight years, employment growth for this group should be about average, with most available jobs being replacement openings. The relatively young nature of this group indicates that the occupation offers entry-level positions to recent graduates, while more experienced biologists advance to managerial positions. Graduates with multidisciplinary backgrounds should have little difficulty finding jobs, and at present there is a shortage of biologists with PhDs in research.

Geographic Distribution of Employment – 1981 (%)

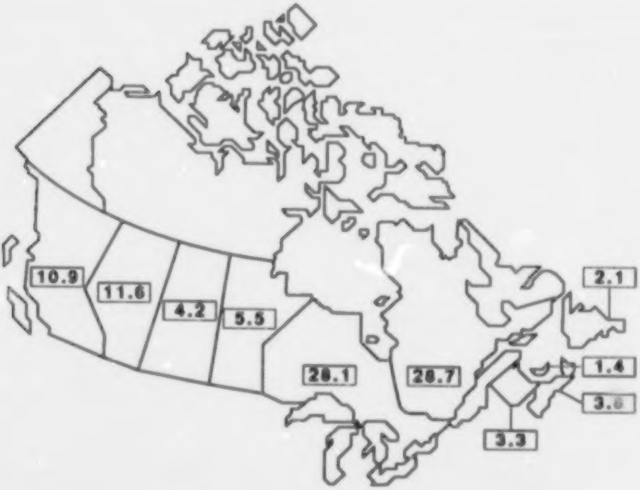


2135 Life Sciences Technologists and Technicians

Typical occupations: bacteriology technicians, agricultural technicians, seed analysts, soil technologists, forest technologists, botanical technologists

Employment is expected to grow at about an average rate into the mid-1990s, with nearly 950 new jobs and 4,800 additional replacement openings. Prospects appear to be the best in the area of quality control in agriculture and fisheries, and in environmental protection. Candidates with computer-related, diagnostic skills and multidisciplinary design or development should have little difficulty finding work.

Geographic Distribution of Employment – 1981 (%)

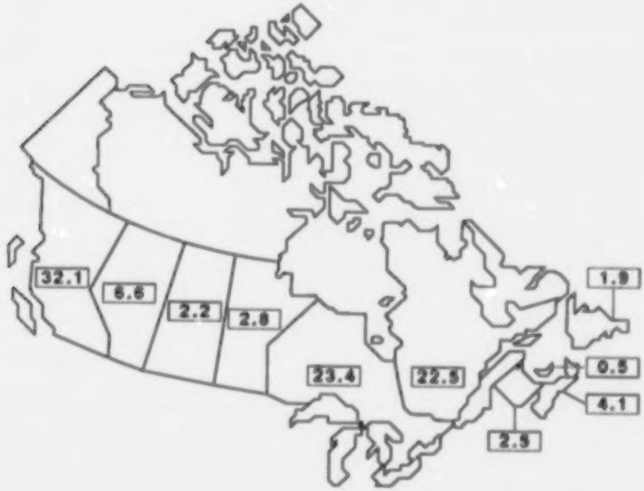


2139 Life Sciences

Typical occupations: ecologists, forest agrologists, forest pathologists, naturalists

Job prospects for this occupational group will be below average over the next eight years. Most job opportunities will be replacement openings, which are expected to outnumber new jobs by five to one. Employment is usually full-time, although it fluctuates during the year, peaking during the warm months.

Geographic Distribution of Employment – 1981 (%)

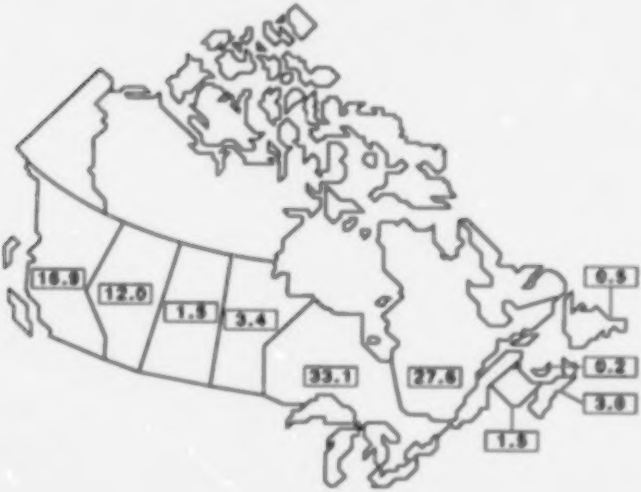


2141 Architects

Typical occupations: building architects, landscape architects, naval architects

The employment rate for the next eight years for architects is expected to be about average. Improved activity in the construction industry, expected in the short term, should increase job prospects. Since architectural work is highly vulnerable to economic conditions, recessions cause higher unemployment. Job prospects are best for architects familiar with computer-aided design. Future opportunities for employment may be best with smaller companies because of the increasing popularity of renovations and the maintenance of existing houses.

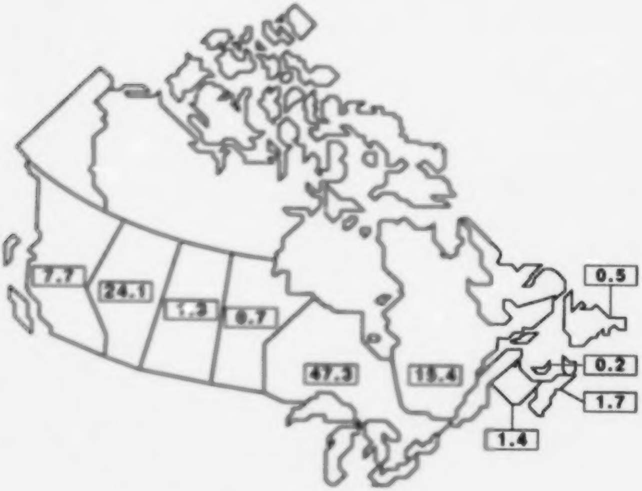
Geographic Distribution of Employment – 1981 (%)



2142 Chemical Engineers

Long-term job prospects in this area are quite good. Current conditions are more favourable than for most occupations, with lower unemployment rates, and Canada Employment Centres are still reporting a number of hard-to-fill vacancies. Future employment is expected to increase at least as fast as overall employment up to 1995. Over this period, about 500 new jobs are expected, and about 10% of the work force will leave, creating additional openings.

Geographic Distribution of Employment – 1981 (%)

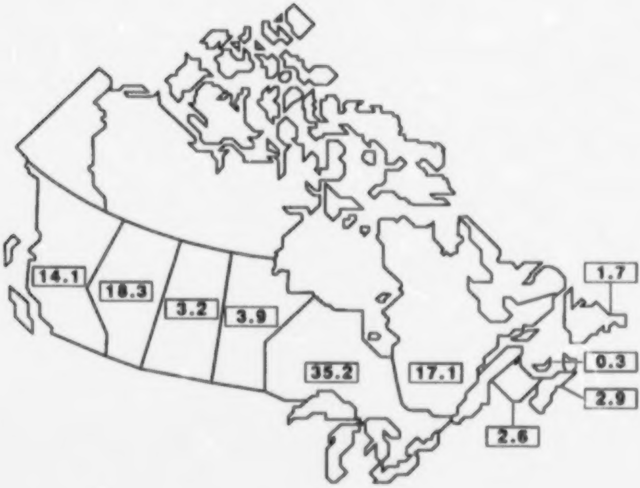


2143 Civil Engineers

Typical occupations: structural design engineers, construction engineers, transportation engineers, road engineers, pollution control engineers, municipal engineers

Over the next eight years, employment is expected to grow at least as fast as the rate for the labour market as a whole. About 14,000 openings are anticipated, of which 4,000 will be new jobs and 10,000 will be vacancies left by departing personnel. The unemployment rate for this group is low. A growing Canadian population and the resulting need for new housing and transportation systems are an indication of good long-term prospects for employment growth.

Geographic Distribution of Employment – 1981 (%)

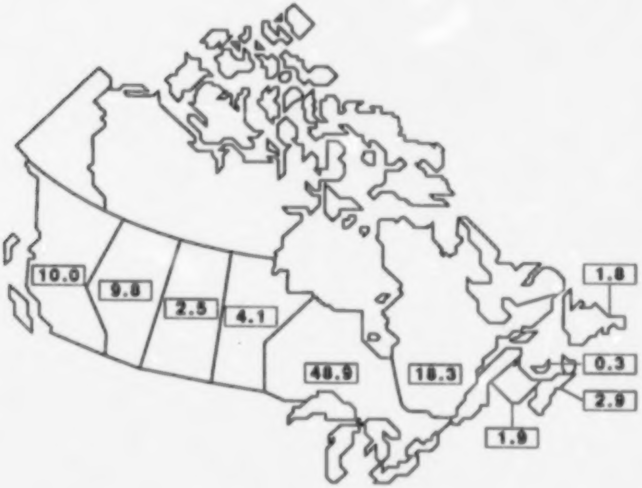


2144 Electrical Engineers

Typical occupations: electrical power engineers, electronics engineers

The current labour market for electronics engineers is better than for most engineers and much better than for most occupations. The growth in telecommunications, fibre optics and microprocessor technology has increased the demand for electronics engineers. The need for electrical power engineers is somewhat less, but still greater than for most occupations. There should be about 2,200 new electrical engineering jobs over the next eight years, with another 7,400 replacement openings.

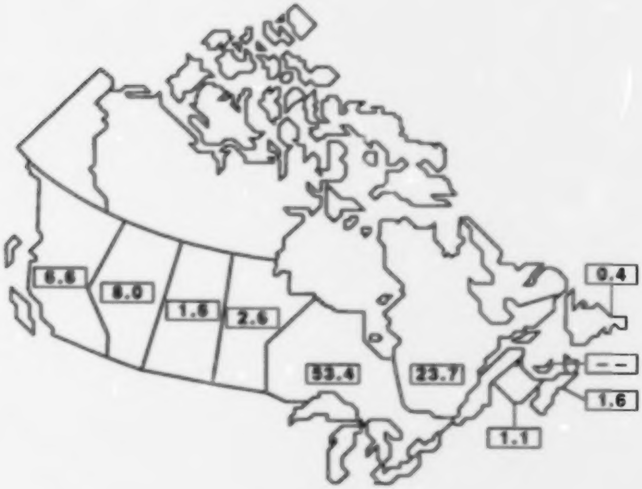
Geographic Distribution of Employment – 1981 (%)



2145 Industrial Engineers
1173 Organization and Methods Analysts

Employers are usually reluctant to lay off industrial engineers, because they are key personnel in maintaining efficient operations. Accordingly, they fare reasonably well during difficult times. Current labour market conditions are better than for most occupations, with about average employment growth to 1995. There should be 2,000 new industrial engineering jobs, and another 8,000 openings created by departing personnel. Employment is exceptionally stable throughout the year. Nearly all industrial engineering jobs, which are mainly in manufacturing and engineering consulting firms, are full-time.

Geographic Distribution of Employment – 1981 (%)

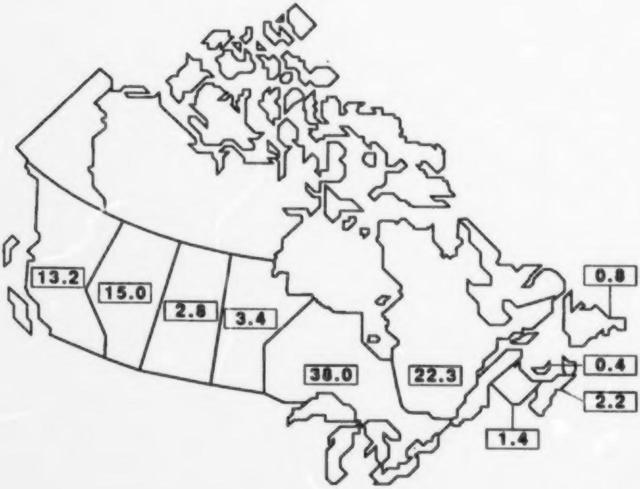


2146 Agricultural Engineers
2157 Community Planners
2159 Professional Engineers

Typical occupations: agronomists, irrigation specialists, urban planners, rural planners, ceramic engineers, forest engineers, insulation engineers

Job prospects for this group of occupations are better than for the labour force in general. Unemployment rates are far lower than average, and Canada Employment Centres continue to report a number of hard-to-fill vacancies in these areas. There are about 14,000 jobs in this group overall, 44% of which are community planner positions. Most jobs are full-time, although part-time work represented 12% of the total in 1981.

Geographic Distribution of Employment – 1981 (%)

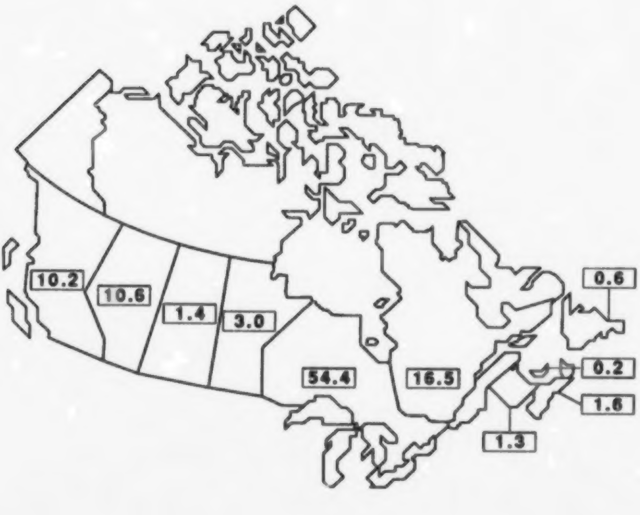


2147 Mechanical Engineers

Typical occupations: automotive engineers, plant and machine designers, heating systems design engineers, refrigeration engineers, hydraulics engineers

About 2,400 new mechanical engineering jobs and 7,500 replacement openings are anticipated over the next eight years, representing a much better labour market situation than in most occupations. Future employment growth is expected to be the same as the overall occupational average. The largest number of openings will be in plant engineering. Vacancies in heating, ventilation and air-conditioning design will vary with new plant and building construction.

Geographic Distribution of Employment – 1981 (%)

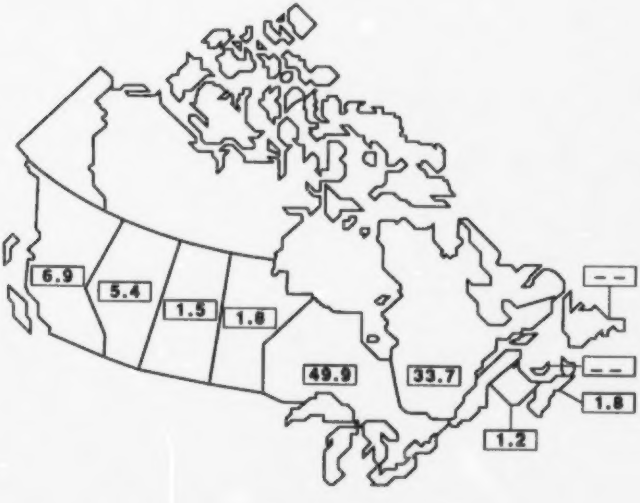


2151 Metallurgical Engineers

Typical occupations: extractive metallurgists, materials engineers, smelting engineers, process metallurgists

Job opportunities are about average and may remain so up to 1995. Unemployment rates are very low for metallurgical engineers, and Canada Employment Centres continue to report a modest number of hard-to-fill vacancies. Over the next eight years, there should be about 200 new jobs, and 600 replacement openings.

Geographic Distribution of Employment – 1981 (%)

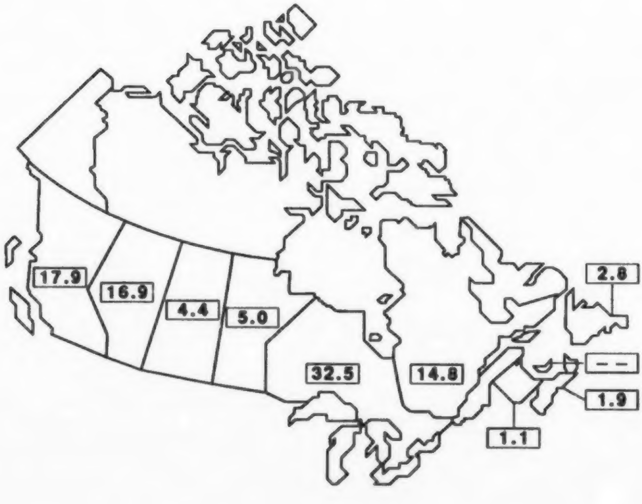


2153 Mining Engineers

Typical occupations: design engineers, mine exploration engineers, mine production engineers, mineral engineers, safety engineers

The employment outlook for the next eight years is optimistic, with growth rates about the same as the overall occupational average. Excluding moves into management, about 1,400 replacement openings and 400 new jobs are expected in the next eight years. While most opportunities are in small communities, openings in major urban centres are the most eagerly sought. Specialties of growing importance in this field are rock mechanics and mine planning.

Geographic Distribution of Employment – 1981 (%)

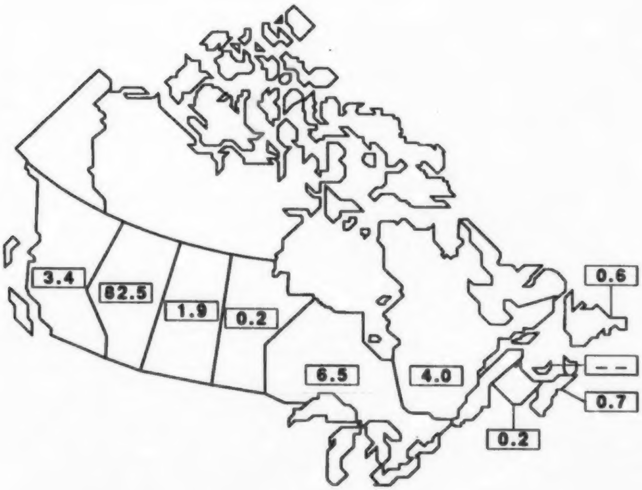


2154 Petroleum Engineers

Typical occupations: drilling engineers, reservoir engineers, oil production engineers, pipeline engineers

During the energy crisis of the 1970s, employment growth in this occupation was explosive. In the early 1980s, however, the recession, high interest rates and lower oil prices combined to restrain employment. A return to faster-than-average growth rates is foreseen for the period up to 1995, creating 500 new positions and 700 replacement jobs. Despite the current slack in domestic oil exploration activity, unemployment among petroleum engineers is very low.

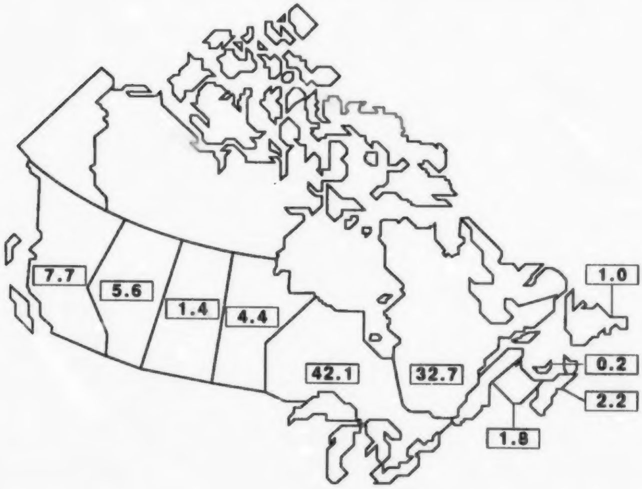
Geographic Distribution of Employment - 1981 (%)



2155 Aerospace Engineers

Employment in this occupation fluctuates more than in other types of engineering, because of the boom-or-bust cycles characteristic of the industry. On average, though, the outlook for aerospace engineers is good. Unemployment rates are very low, and anticipated growth rates are well above average for the 1987 to 1995 period with about 400 new jobs and 1,000 replacement jobs expected.

Geographic Distribution of Employment – 1981 (%)

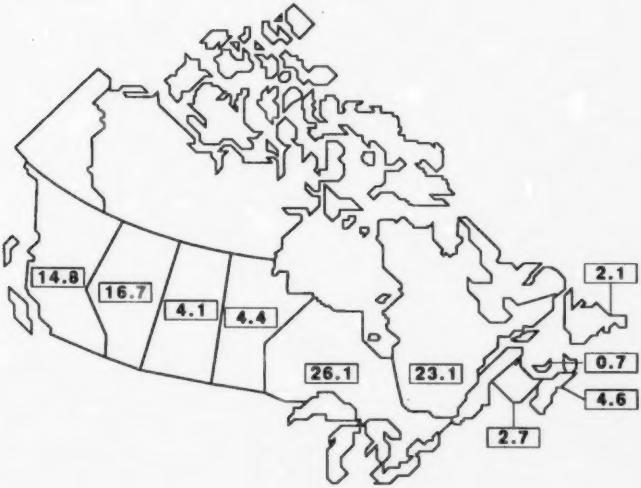


2161 Surveyors

Typical occupations: land surveyors, marine surveyors, pipe-line surveyors, port surveyors, topographical surveyors, hydrographers

The employment growth for surveyors should be about average over the next eight years. Employment in these occupations may be moderately susceptible to change in economic conditions. Because the work is mostly outdoors, employment peaks during the warm months of the year. The incidence of part-time work has increased but remains well below average. Aerial surveyors are particularly affected by technological developments. Sophistication of equipment in other areas may further affect the demand for this group.

Geographic Distribution of Employment – 1981 (%)

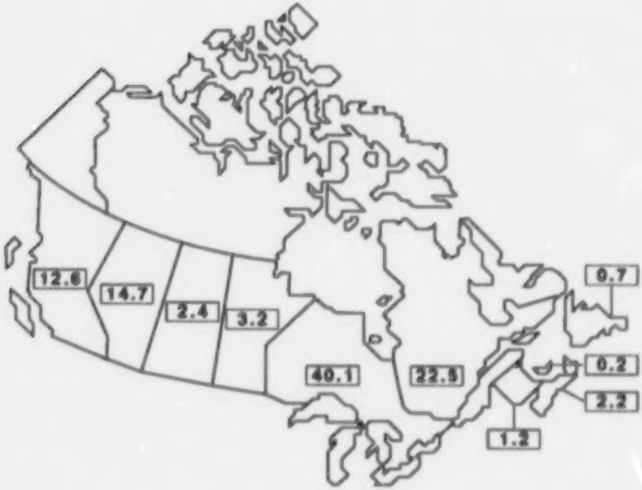


2163 Draughting Occupations

Typical occupations: aeronautical, architectural, cartographic, electronic and mechanical draughtspeople

Employment growth is this occupation should increase at an average pace over the next eight years. Computer-aided design (CAD) has eliminated many repetitive tasks and may place more demand on the draughtsperson for better design skills, more sophisticated graphics and accuracy of designs. Many companies prefer to retrain experienced draughtspersons in CAD rather than to hire inexperienced community college graduates with CAD training.

Geographic Distribution of Employment – 1981 (%)

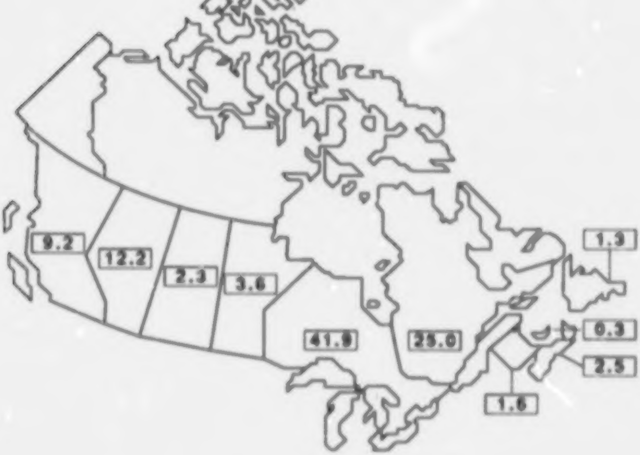


2164 Architectural Technologists and Technicians
2165 Engineering Technologists and Technicians

Typical occupations: electrical technicians, electronic technicians and technologists, quality control technicians, architectural technologists, mechanical engineering technologists

The employment outlook for the 1986 to 1995 period for this group calls for average employment growth. New job opportunities are not promising. Technology has wielded a double-edged sword in these occupations. On the one hand, innovations such as computer-aided design have enhanced productivity and efficiency; on the other, automation threatens to make some technicians redundant.

Geographic Distribution of Employment – 1981 (%)

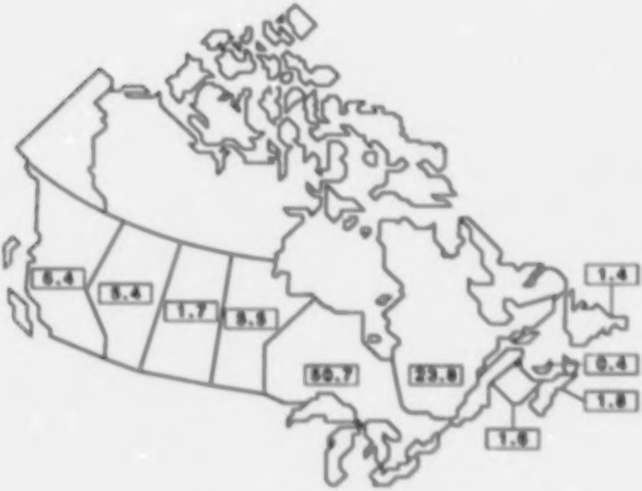


2181 Mathematicians, Statisticians and Actuaries

Typical occupations: actuaries, demographers, statisticians, sampling experts, survey statisticians

To 1995, employment growth for this group is expected to be about the same as the average for all occupations. Job openings will occur as a result of an increase in the volume of new business and through vacancies created by departing personnel. Because of demographic changes, prospects are better for actuaries working in insurance and finance. Teaching jobs may exist in colleges and universities for those with PhDs in mathematics and/or statistics and knowledge of computer systems. Operations research is a new and expanding area for employment.

Geographic Distribution of Employment – 1981 (%)

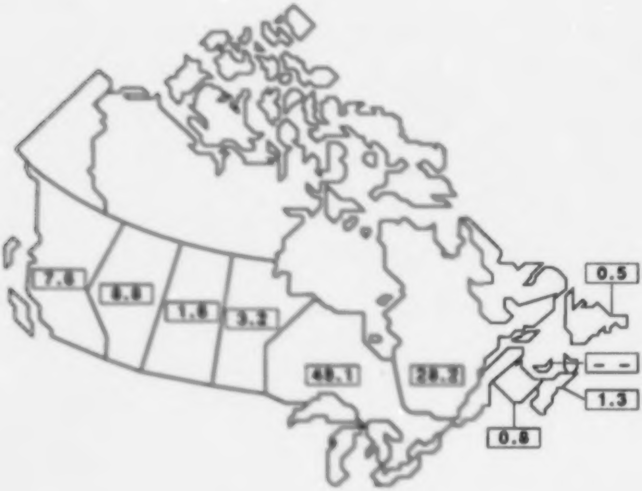


2183 Systems Analysts and Computer Programmers

Typical occupations: software systems analysts, programmers, methods analysts

Current projections for future employment growth for this group approximate those for the labour market at large. There will not be many job openings created by people retiring, since the occupation has a young age profile, but there will be lots of openings created by programmers and analysts moving into other occupational areas. Labour market conditions are more favourable than for most occupations. Unemployment has been relatively low, and Canada Employment Centres have reported a number of hard-to-fill vacancies. The information explosion has led to new openings for data-base managers, information systems engineers, software engineers, programmers and information scientists.

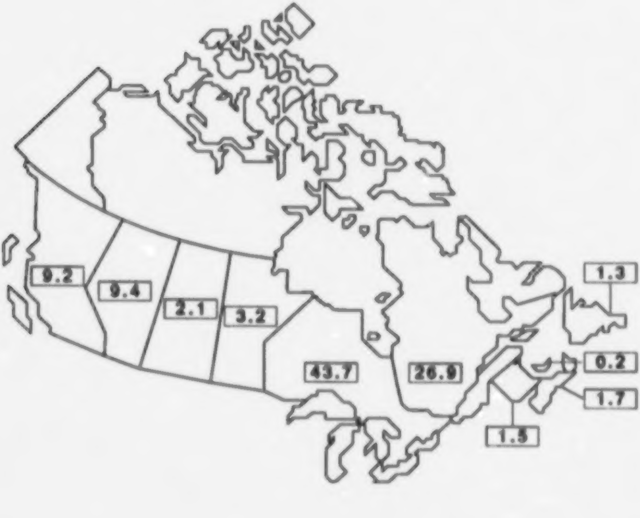
Geographic Distribution of Employment – 1981 (%)



2311 Economists

Over the next eight years, employment will approximate the average of all occupations. The demand for economists in the public administration sector will be limited because of fiscal restraint, but job opportunities in the business services sector may be better with the increasing practice by government agencies of hiring contractors and specialists. Candidates with quantitative backgrounds and knowledge of electronic data-processing techniques will have a competitive edge in the job market. The occupational age profile indicates that entry-level positions do occur for new graduates. Experienced economists may advance to managerial occupations.

Geographic Distribution of Employment – 1981 (%)

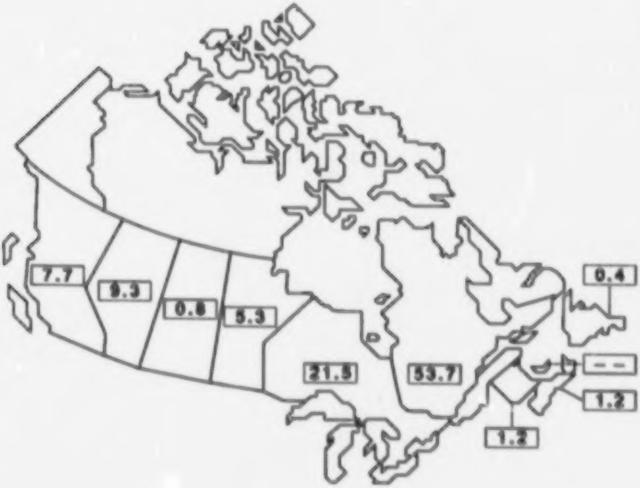


2313 Sociologists and Anthropologists

Typical occupations: anthropologists, archaeologists, criminologists, ethnologists, sociologists

Employment growth for these occupations during the 1987 to 1995 period will be about average. Growing demand for social services is expected to increase the number of new job openings, and there will be some replacement openings. Since relatively few workers may be "life-time" sociologists, there probably will be better-than-average job opportunities for new graduates, but the present oversupply of sociologists and highly qualified candidates will mean that those graduates with only an undergraduate degree may find it hard to find jobs in this field.

Geographic Distribution of Employment – 1981 (%)



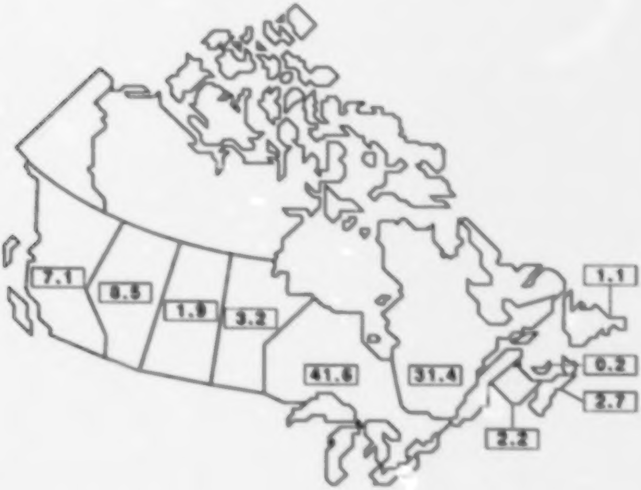
2315 Psychologists

Typical occupations: child psychologists, industrial psychologists, mental health counsellors, neuropsychologists, research psychologists

Employment growth between 1986 and 1995 for this group is expected to keep pace with the average. Job openings will be a combination of new positions and openings caused by personnel leaving the workforce. This occupation offers entry-level positions for new graduates; more experienced workers move into managerial positions.

Although social and economic changes in society are increasing the demand for this group, the current static provincial expenditures in health services may subdue job prospects.

Geographic Distribution of Employment – 1981 (%)

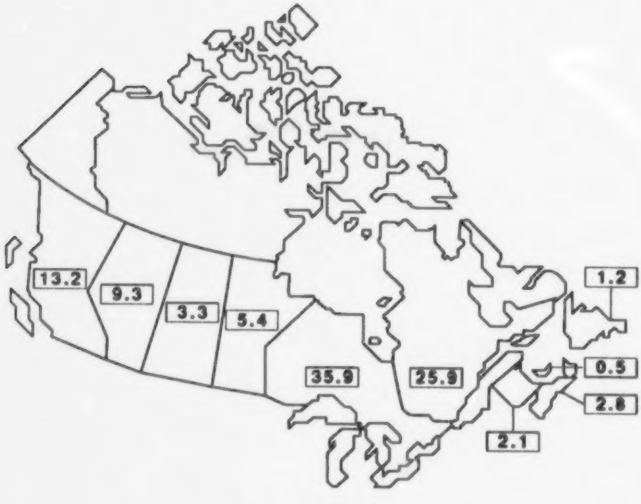


2331 Social Workers

Typical occupations: adoption agents, family counsellors, parole officers, welfare case workers

During the early 1980s, social workers had better-than-average job opportunities, but over the next eight years, employment growth should be about the average for all occupations. Nearly 50% of all social workers are in health services, while another significant number work in provincial administration and hospitals. Federal and municipal governments account for about 10%. The very nature of social work – to help individuals and families adjust and cope with problems – means the demand for social workers will increase as the total population increases.

Geographic Distribution of Employment – 1981 (%)

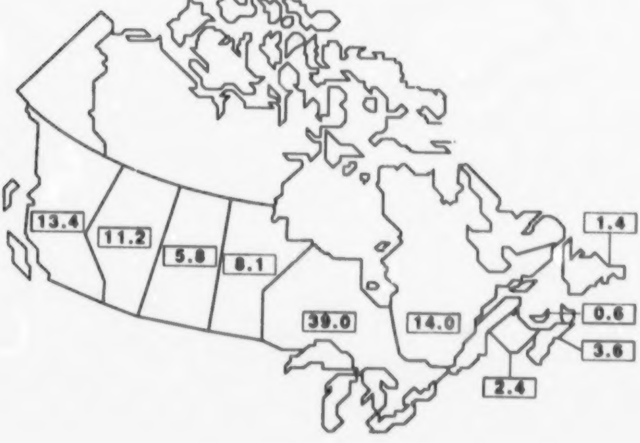


2333 Welfare and Community Services

Typical occupations: camp counsellors, charity workers, child welfare workers, community service workers

Employment growth for this group will remain about average into the mid-1990s. Demand is tied to municipal spending for recreation centres, swimming pools and related sport and fitness activities. As more parents both work outside the home, personnel will be needed to provide winter and summer programs; as the population ages, more services will be needed for senior citizens; and more specialized staff will be needed to assist disabled persons. These occupations offer mainly entry-level positions for new graduates of high school, community college and university. Volunteer programs enable young people to gain marketable managerial and leadership skills before actually entering the work force.

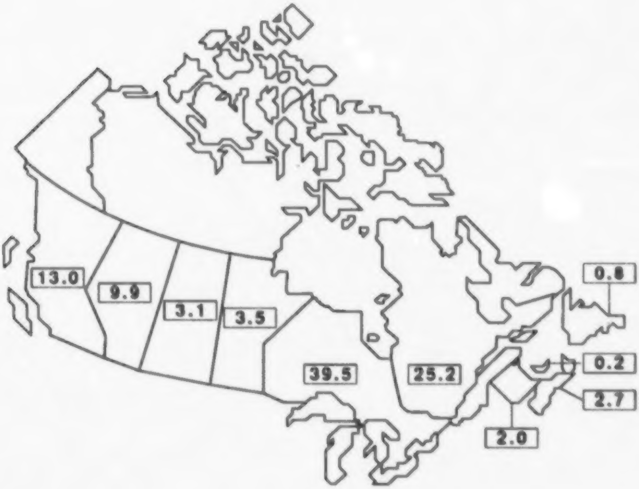
Geographic Distribution of Employment – 1981 (%)



2343 Lawyers and Notaries

The employment growth for the next eight years for this group is expected to be above the occupational average. Growth areas for legal advice include constitutional law, consumer protection, family law and corporate-securities law. Employment is generally stable. However, lawyers with their own practices can be affected by business cycle movements and by the trend to advertising of legal services.

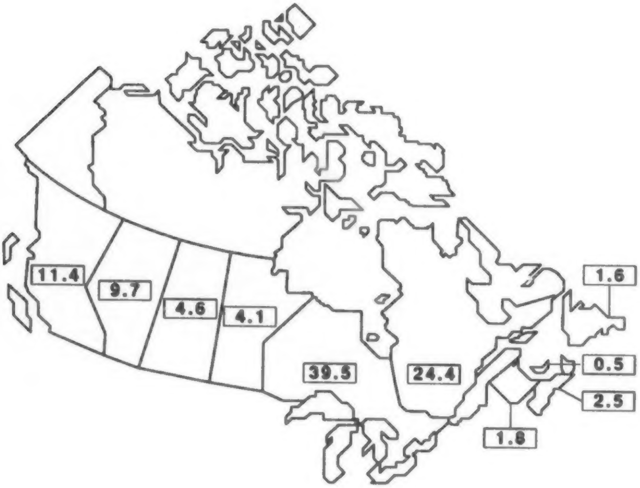
Geographic Distribution of Employment - 1981 (%)



2351 Librarians, Archivists and Conservators

Employment growth for this group has slowed down, and is expected to be equal to the average for all occupations during the next eight years. The services sector, particularly education services, employs a substantial portion of workers in this category. The age profile implies that entry-level positions are available to new university graduates. The prospects are best for people specializing in scientific and technical fields, particularly in research libraries.

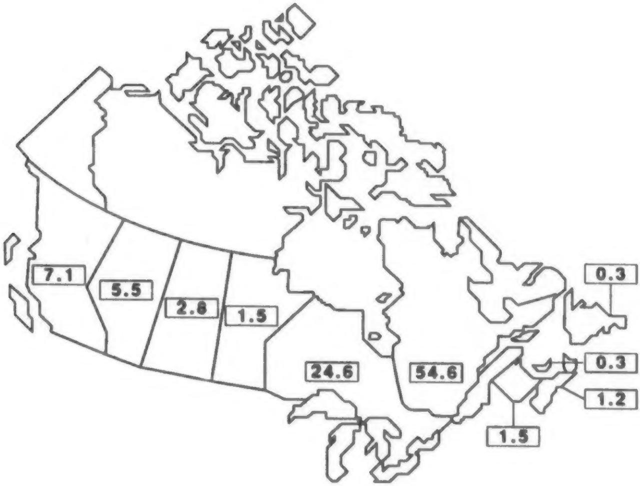
Geographic Distribution of Employment – 1981 (%)



2353 Technicians in Library, Museum and Archival Sciences

Between 1986 and 1995, the employment growth rate for this group is expected to be about the average of all occupations. Most technicians work in education and miscellaneous services, with some employed in the three levels of government. The effects of new computer technology are not straightforward: computer systems that catalogue publications and control circulation may increase opportunities for technicians, but as systems become easier to use by the public, there may be fewer jobs for junior technicians.

Geographic Distribution of Employment – 1981 (%)

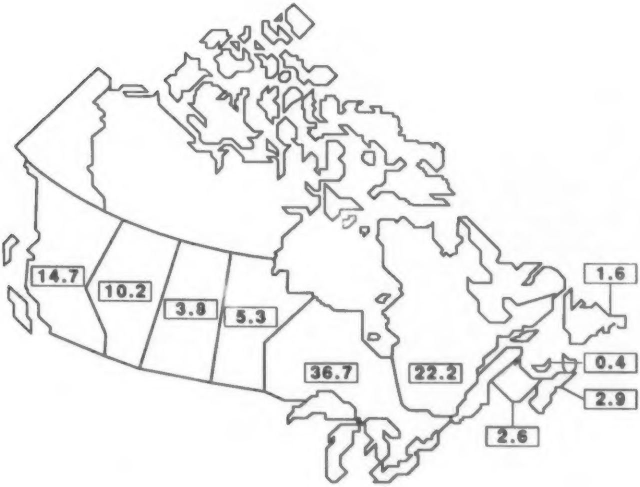


2391 Educational and Vocational Counsellors

Typical occupations: educational advisors, group development workers, vocational counsellors in schools and business

The employment outlook for this occupation calls for about average growth over the next eight years. The trend toward continuing education is increasing the student population and the number of students who may need counselling services. Affirmative action and employment equity programs may increase the demand for counsellors who assist special-need clients. Job prospects may be better for counsellors working with older students, because this group will increase with the natural aging of the population.

Geographic Distribution of Employment – 1981 (%)

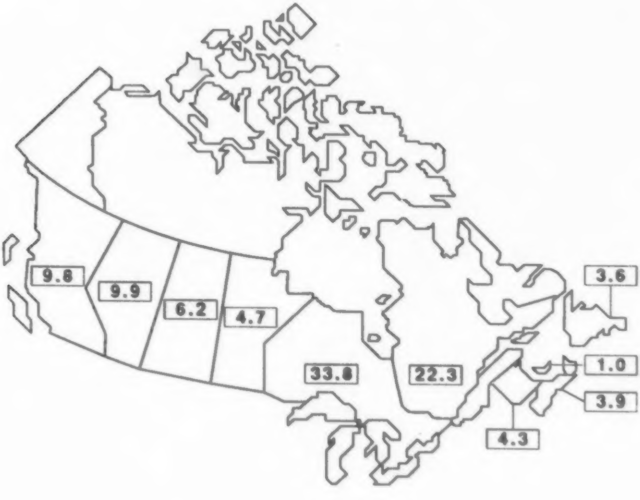


2511 Ministers of Religion

Typical occupations: bishops, curates, missionaries, evangelists, priests, rabbis, Salvation Army officers

Employment growth in this category was well below the average for all occupations during the 1970s, but is expected to expand at least as fast as that average between 1986 and 1995. There should be about 15,000 replacement openings and 1,300 new jobs over the next eight years. The labour market situation for ministers is better than for most occupations, as reflected by unemployment rates. There are very few job losses during a recession; in fact, religious officers may be in more demand during an economic downturn.

Geographic Distribution of Employment – 1981 (%)

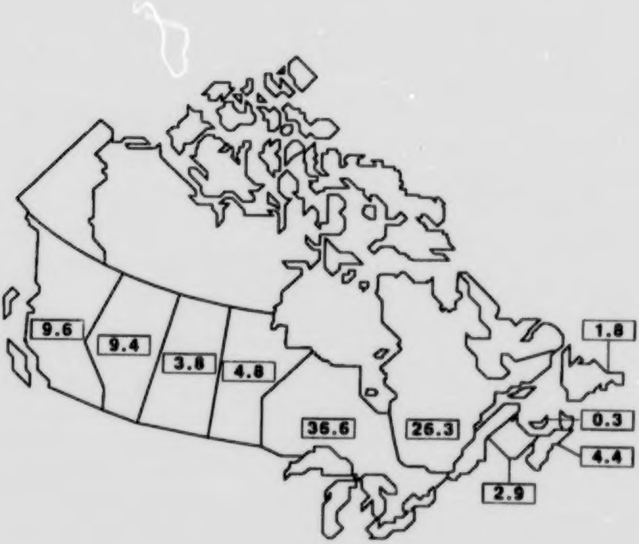


2711 University Teachers

Typical occupations: professors, lecturers, instructors, demonstrators, fellows

Current projections forecast employment growth for this group at a rate only slightly higher than for the labour force as a whole. Labour market conditions for university teachers have been strong since 1981 because of increasing enrollments. In comparison to labour market conditions for other occupations, those for teachers rank among the most favourable.

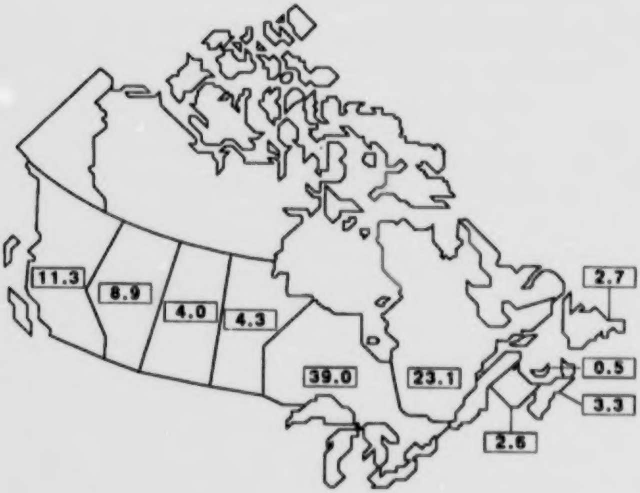
Geographic Distribution of Employment – 1981 (%)



2731 Elementary and Kindergarten Teachers

Elementary teachers can expect average employment growth up to 1995 but the number of replacement positions is expected to be below average. Current labour market conditions have improved slightly over the last couple of years, and as the children of the current baby boom move into elementary school, the demand for elementary teachers will increase and employment should rise. Provincial funding, however, will also determine employment growth. Part-time work exists in the form of supply teaching and specialty teaching (music, art, etc.).

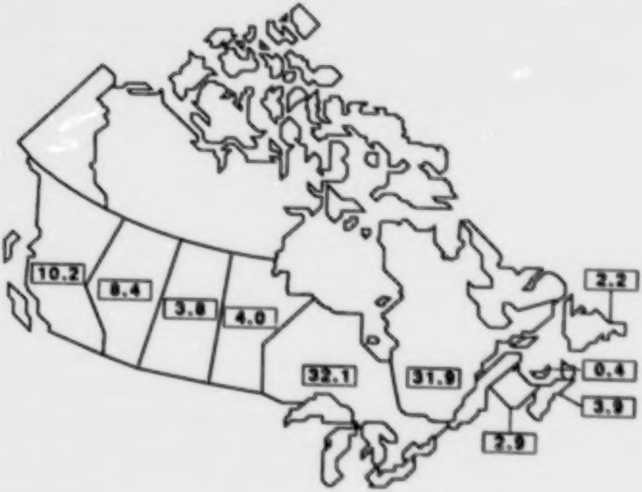
Geographic Distribution of Employment – 1981 (%)



2733 Secondary School Teachers

Over the next eight years employment growth for secondary school teachers should be about average, but the demand should increase in the last few years of the forecast period. Current labour market conditions show that secondary school teachers have less unemployment than elementary teachers. This may reflect current demographics and differences in teacher supply. As at all teaching levels, there is some part-time work but no structured summer employment in this classification.

Geographic Distribution of Employment – 1981 (%)

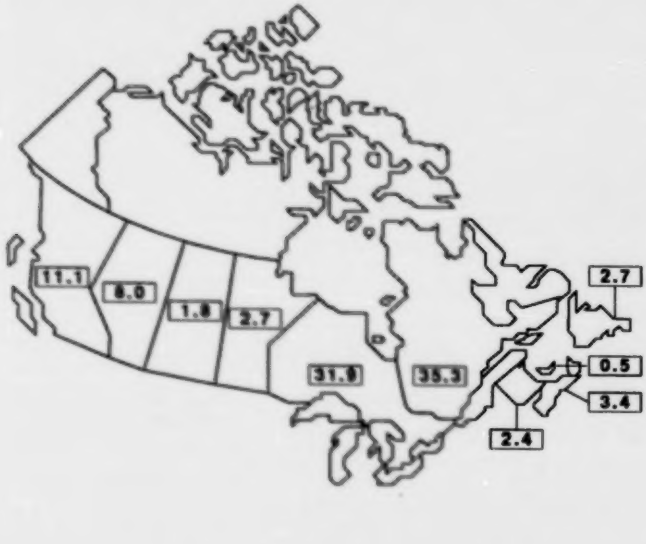


2791 Community College and Vocational Teachers

In the 1970s, employment growth among community college teachers was phenomenal, increasing at an average annual rate of 12.5%. Now that college enrollment has leveled off, employment growth should continue at a more moderate rate during the next eight years. Current labour market conditions indicate lower-than-average unemployment; replacement jobs should account for the majority of job vacancies up to 1995.

Part-time employment is available in this occupation. Community college and vocational teaching is not nearly as seasonal as at the elementary or secondary teaching levels, since many community college and technical institutions offer summer courses.

Geographic Distribution of Employment – 1981 (%)

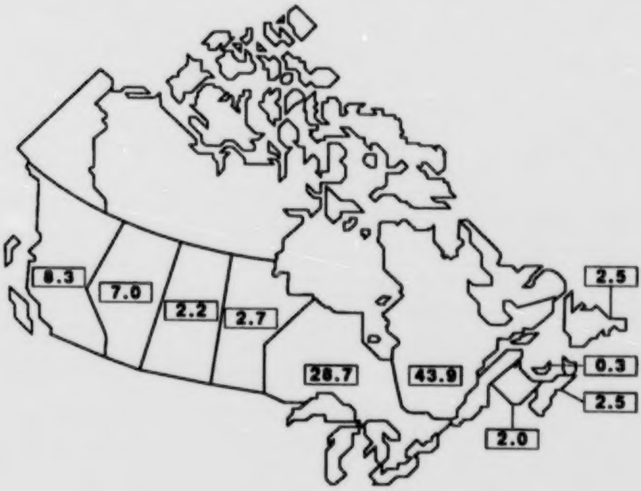


2795 Teachers of Exceptional Students

Typical occupations: teachers of blind and hearing-impaired students, mentally and physically disabled students, and gifted students

Employment growth from 1987 to 1995 for this group should be above the occupational average, but not as expansive as in previous years. The trend towards putting special needs students into regular classrooms, with special education teachers acting as advisors, will probably reduce employment growth somewhat. Most new job openings will be as a result of new growth, with a smaller proportion resulting from teachers leaving the work force. The labour market conditions for this occupation have improved in recent years, and part-time employment is higher than the overall occupational average.

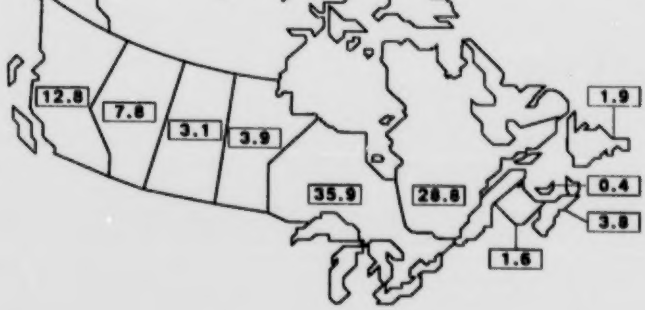
Geographic Distribution of Employment – 1981 (%)



3111 Physicians and Surgeons

Employment growth in this profession is expected to slow down during the next eight years. Although 24,000 new physicians will be needed for replacement positions alone during that period, there is still a projected surplus of physicians by the year 2000. Most provinces have incentive programs offering special privileges and higher incomes to physicians who are prepared to work in remote or underserved areas. The increase in the number of old people and the development of new medical techniques, drugs and procedures are creating a need for different specialists.

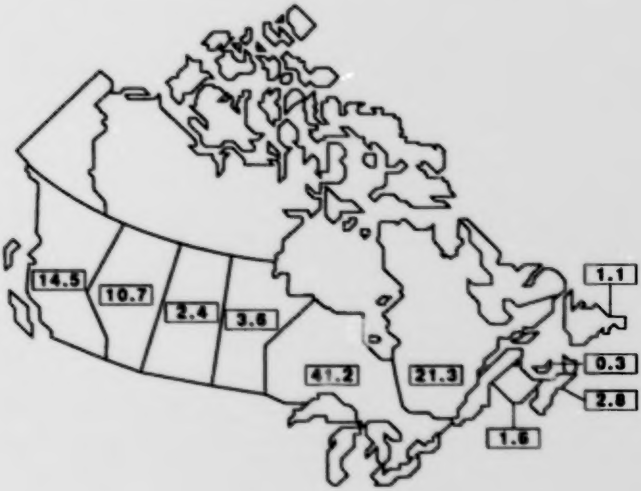
Geographic Distribution of Employment – 1981 (%)



3113 Dentists

Employment growth has been strong for dentists since the early 1970s but is expected to decline over the next eight years. The Canadian Dental Association projects a surplus of dentists by 1995. Accordingly, only 4,200 dentists will be required for replacement openings. Since many dentists are self-employed, unemployment among dentists is virtually non-existent. Currently, 94% of dental personnel work full-time.

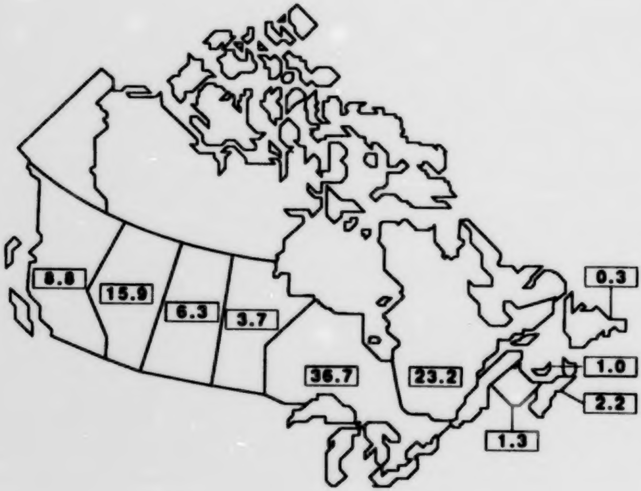
Geographic Distribution of Employment – 1981 (%)



3115 Veterinarians

Today, the employment situation for veterinarians is extremely favourable, and should remain so for the next eight years. Between 1987 and 1995, more than 1,500 new veterinarians will be needed. Roughly 200 will fill a job created by growth in the economy; the remainder will fill existing positions vacated by veterinarians who leave active practice. Unemployment is low in comparison with the general work force, and the number of jobs available per 1,000 workers is almost six times higher than the average.

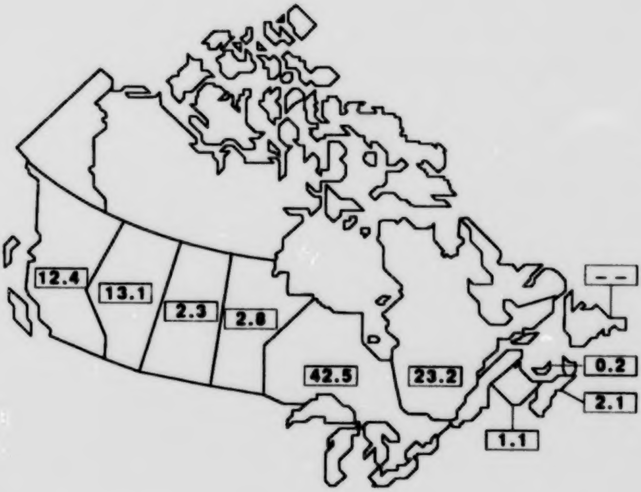
Geographic Distribution of Employment – 1981 (%)



3117 Osteopaths and Chiropractors

Employment growth for chiropractors and osteopaths was very strong throughout the 1970s and early 1980s and should continue to equal the overall occupational average over the next eight years. Approximately 1,400 new positions will be generated, of which about 30% should be new jobs and the remainder, replacement openings. Unemployment among osteopaths and chiropractors is virtually unknown, primarily because most are self-employed, but what does influence job opportunities is the student capacity of Canada's chiropractic training institutions.

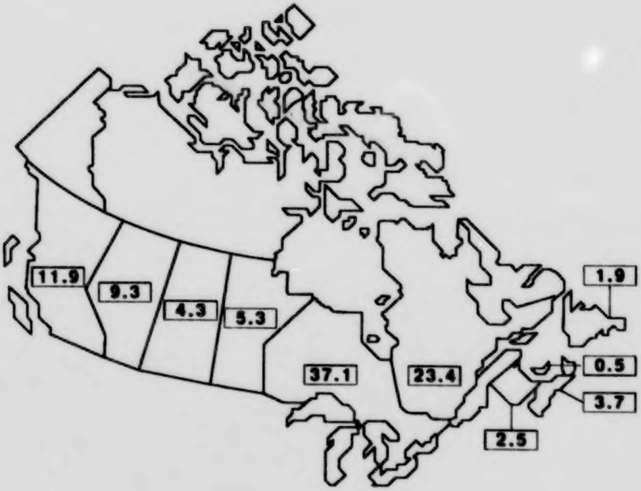
Geographic Distribution of Employment – 1981 (%)



3131 Nurses

Since the early 1970s, the demand for nurses has grown annually at a much faster rate than for the labour force in general. Projections, however, suggest that this trend is not likely to continue through to 1995. Between 1987 and 1995, about 53,000 nursing positions will become available. One in every four of these will be openings created by expanding demand; the remainder will be positions vacated by existing personnel. Current job prospects for nurses are very positive. The rate of unemployment is low, and job vacancies have increased markedly since 1983.

Geographic Distribution of Employment – 1981 (%)

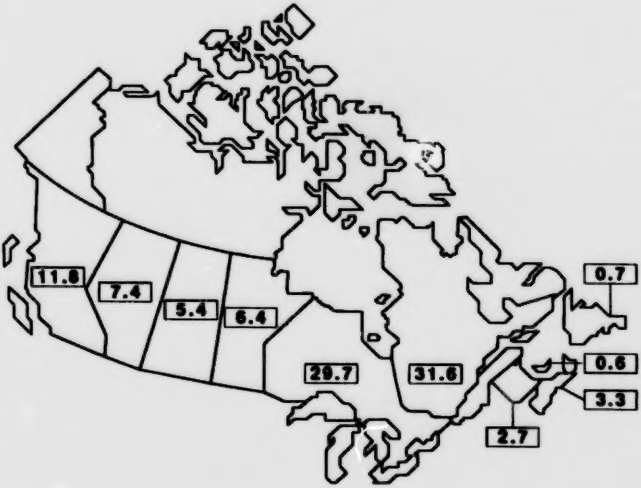


3132 Orderlies
3135 Nursing Attendants

Typical occupations: personal care aides, nursing aides, health care aides, hospital aides, orderlies

The projected rate of employment for this group is about average with about 50,600 job openings generated between 1988 and 1995. One in every five of these will be new positions resulting from increased demand; the remainder will be vacancies created by nursing attendants leaving the active labour force.

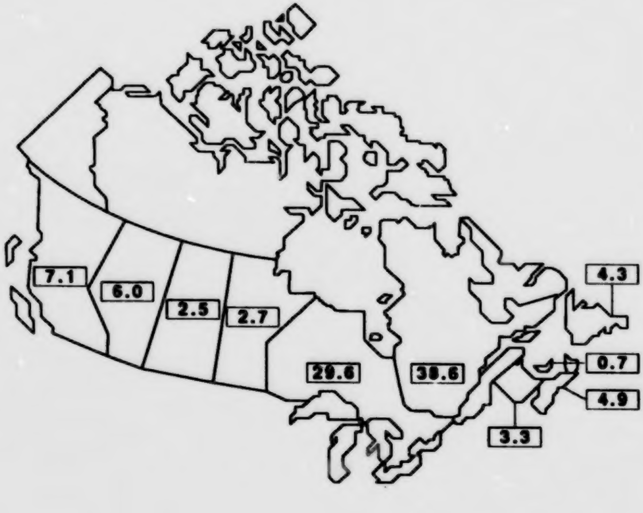
Geographic Distribution of Employment – 1981 (%)



3134 Registered Nursing Assistants

Employment growth in this occupation was above average throughout the 1970s but since 1980 has slowed somewhat, a trend expected to persist throughout the next eight years. There will be about 3,500 new jobs in this field, and a further 13,000 openings created by nursing assistants leaving the active work force. Although the employment picture for nursing assistants is positive, this outlook could change as technology continues to make standard nursing care more complex. Unemployment among nursing assistants is traditionally below that for all occupations.

Geographic Distribution of Employment – 1981 (%)

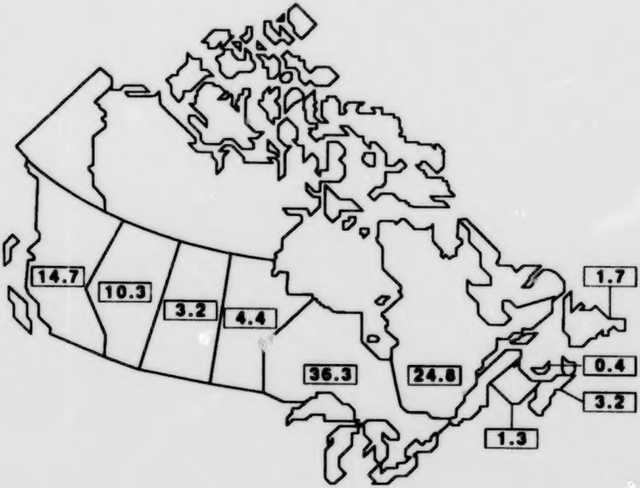


3136 Audio and Speech Therapists
3137 Physiotherapists
3138 Occupational Therapists

Typical occupations: physiotherapists, occupational therapists, audiologists, speech pathologists

Employment growth in this field should remain high in the immediate future and about average through the next eight years when about 4,700 job openings will occur of which two in every five will be generated by increasing demand. Employment prospects for therapists are very good – there is currently a labour shortage in this field.

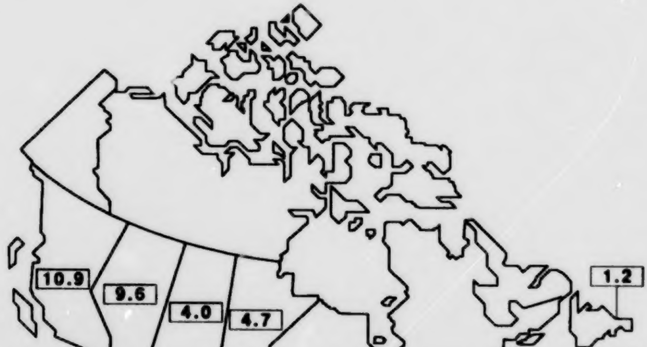
Geographic Distribution of Employment – 1981 (%)



3151 Pharmacists

Employment growth for pharmacists is expected to remain high through to 1995, with more than 7,000 jobs opening up during the next eight years. Almost 20% of these will result from increased demand, the remainder will be replacement openings generated as pharmacists leave the work force. Unemployment among pharmacists is minimal, owing primarily to the high number of self-employed practitioners. As well, the number of job vacancies has increased significantly since 1982, which corresponds to current reports of a pharmacist shortage.

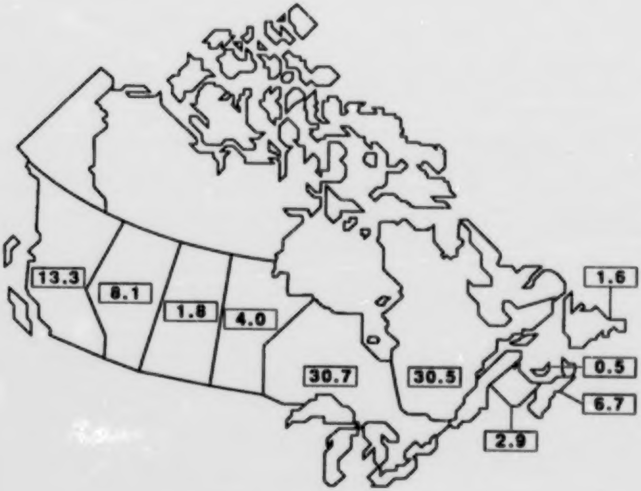
Geographic Distribution of Employment – 1981 (%)



3152 Dietitians and Nutritionists

For the years leading to 1995, the job outlook in this field is about average. There should be about 300 new positions occuring, and almost 1,300 additional job openings will emerge as personnel withdraw from active employment. Although unemployment in this field currently approximates the average for all occupations, the number of job vacancies remains relatively high at the moment.

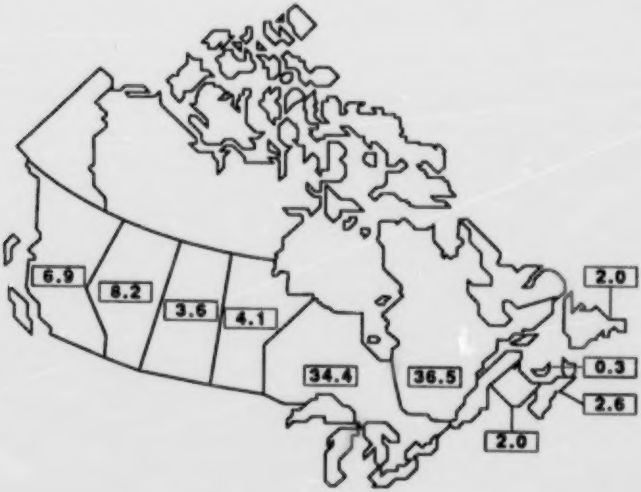
Geographic Distribution of Employment – 1981 (%)



3153 Optometrists

Since 1981, job growth in this field has been relatively strong and should remain at the overall occupational average until at least 1995. About 1,700 jobs will become available in this field, approximately 600 the consequence of increasing demand, the rest caused by optometrists leaving the work force. Unemployment among optometrists is virtually non-existent, partly because of the high number of self-employed professionals. The number of job vacancies is almost four times higher than in the labour force in general.

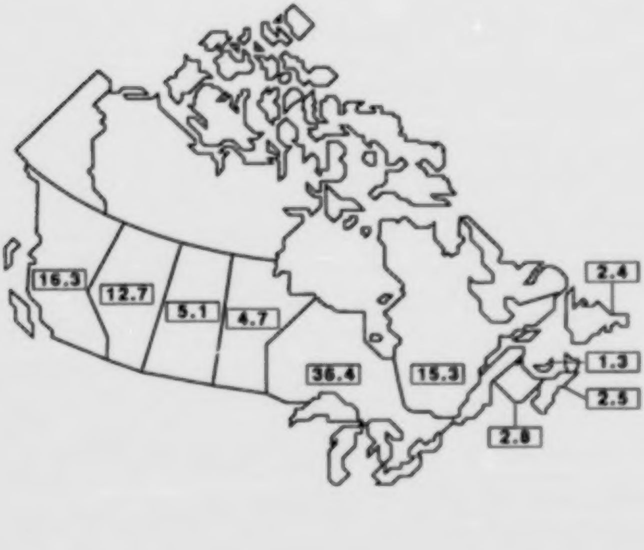
Geographic Distribution of Employment - 1981 (%)



3154 Dispensing Opticians

Although the rate of employment growth for this group is expected to decline, it should continue to match that of the work force as a whole. About 1,400 jobs should become available over the next eight years, of which one in every four will be new while the remainder will be openings created by opticians withdrawing from active practice. Current employment prospects are extremely favourable, with very low unemployment relative to that for the labour force as a whole.

Geographic Distribution of Employment – 1981 (%)

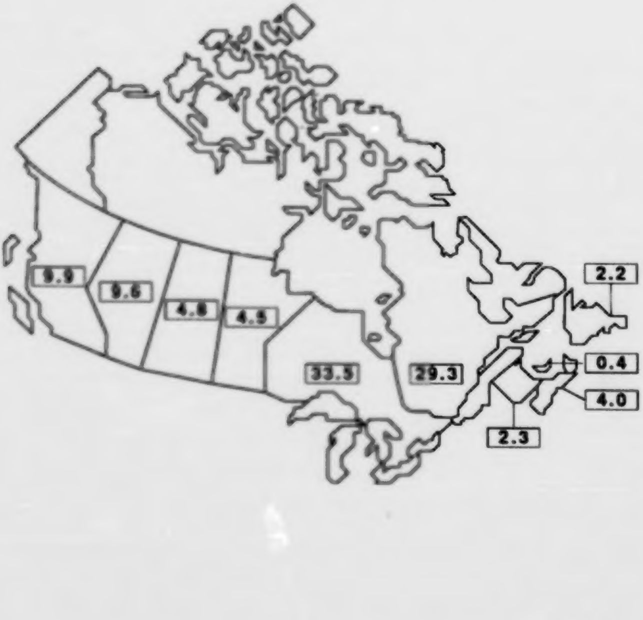


3155 Radiological Technologists and Technicians

Typical occupations: medical radiation technologists, diagnostic radiologists (x-ray), radiation therapists

In the next eight years, unemployment growth for this group is expected to be about the same as for all occupations. Approximately 3,200 job openings will be created, of which almost one-quarter will be new, the remainder vacancies left by technologists leaving the work force.

Geographic Distribution of Employment – 1981 (%)

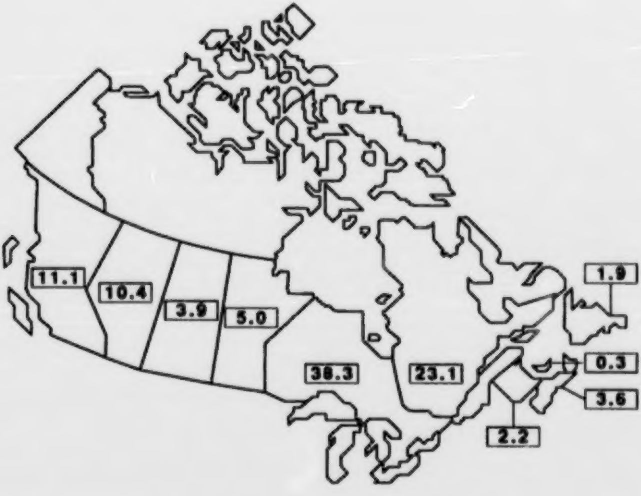


3156 Medical Laboratory Technologists and Technicians

Typical occupations: biochemical, microbiological and cytogenetic technologists, pathological and pharmacy technicians

During the past 15 years, employment growth for medical laboratory technologists has been twice that of the labour force as a whole. Slower growth is expected to 1995. About 10,400 job openings will occur, of which one in three will be new, the remainder, replacement jobs. Job prospects in this field are good at the present time, with low unemployment compared to that of the labour force in general.

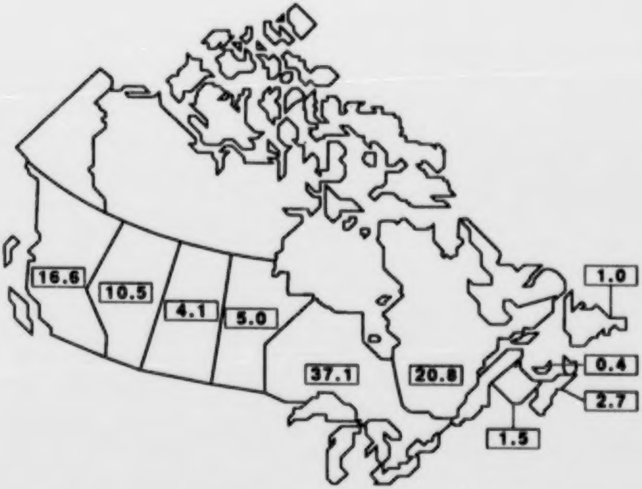
Geographic Distribution of Employment - 1981 (%)



3157 Denturists
3158 Dental Hygienists, Dental Assistants
3161 Dental Laboratory Technicians

Employment growth in this field should continue to surpass the overall occupational average. Between 1987 and 1995, more than 10,000 job openings are expected, more than a half created by personnel withdrawing from the work force. Employment prospects for auxiliary dental personnel are very good. Unemployment is low relative to that for the labour force in general, and the number of reported job vacancies is high.

Geographic Distribution of Employment – 1981 (%)

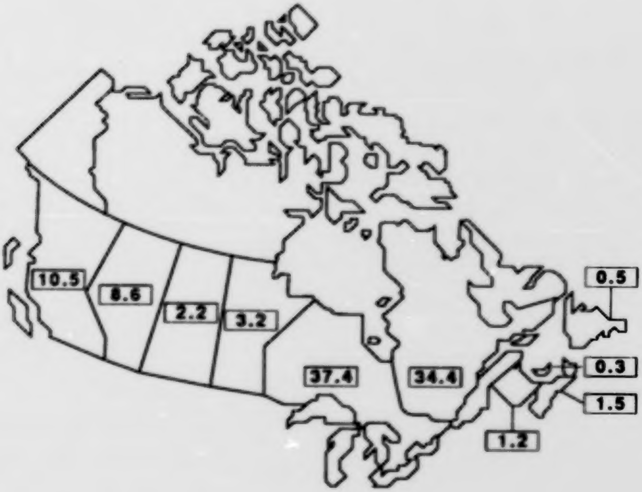


3313 Product and Interior Designers

Typical occupations: interior designers and decorators, textile designers, industrial product designers

Labour market conditions for this occupational group were quite good up to 1986. Employment growth should be about average over the forecast period. Up to 1995, more than 11,000 designers will be needed to fill new job openings and to replace personnel who leave the work force. Unemployment rates remain well below average.

Geographic Distribution of Employment – 1981 (%)

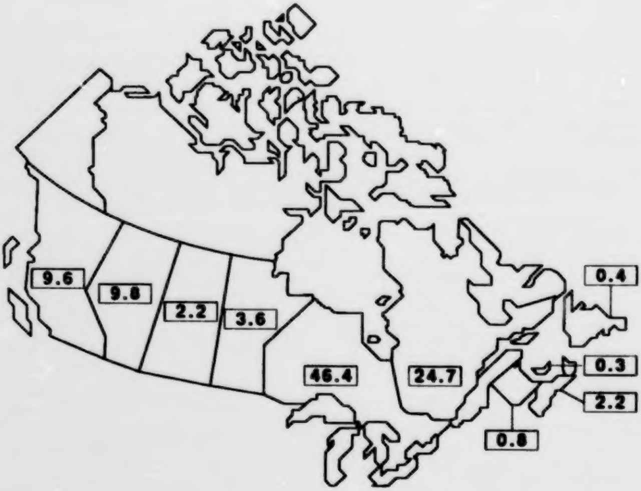


3314 Advertising and Illustrating Artists

Typical occupations: advertising, commercial and graphic artists, medical and scientific illustrators

The employment outlook for these occupations calls for about average growth to 1995, with about 8,100 artists/illustrators needed to fill new jobs and to replace personnel in existing jobs. Advancements in computer graphics have greatly benefited graphic and commercial artists, but labour market conditions should remain only fair over the projection period.

Geographic Distribution of Employment – 1981 (%)

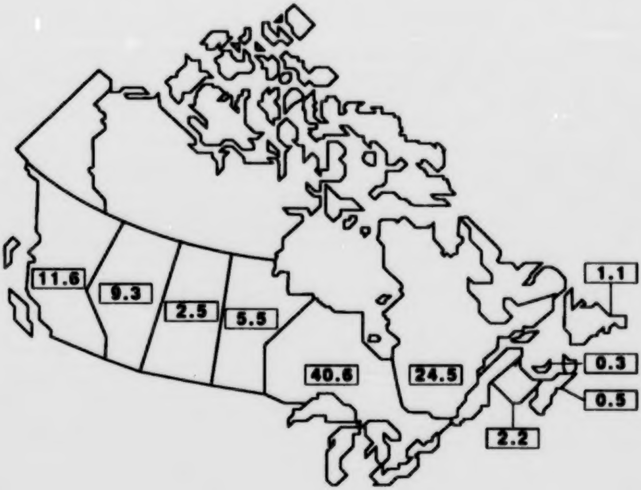


3315 Photographers and Camera Operators

Typical occupations: commercial, industrial and aerial photographers, television and news camera operators

The employment outlook for these occupations calls for above-average growth over the forecast period. Total job openings are expected to be about 5,400 up to 1995, with the majority created by individuals leaving the work force. Labour market conditions for this occupational group are about average, but the increasing use of visual aids has boosted demand for technically competent personnel.

Geographic Distribution of Employment – 1981 (%)

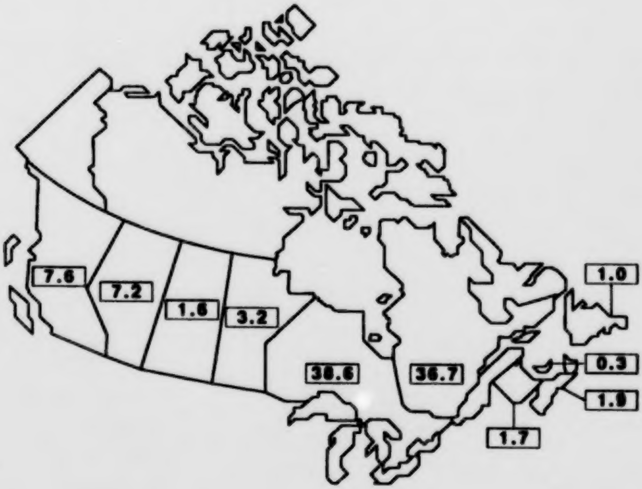


3330 Producers and Directors

Typical occupations: dramatic, musical and program directors, theatrical, movie and video producers

The employment growth for this group should be about average over the next eight years, with about 3,500 job openings up to 1995, (including new and replacement jobs). This group has had fairly good labour market conditions in the past few years, and job opportunities should continue to grow with expansion of the film and video industry.

Geographic Distribution of Employment – 1981 (%)

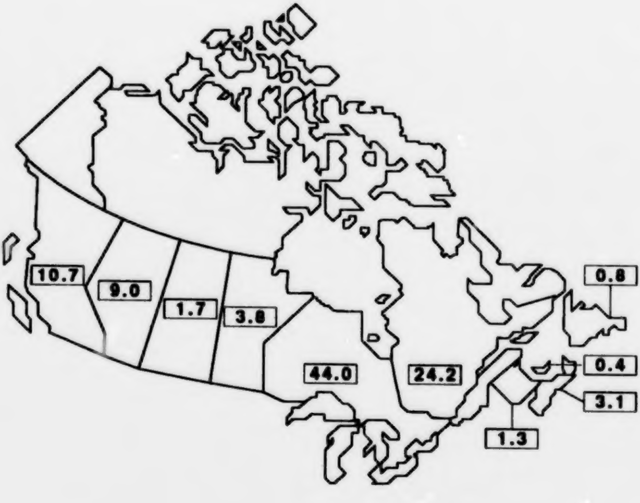


3331 Conductors, Composers and Arrangers
3332 Musicians and Singers
3333 Occupations in Music

Typical occupations: band and orchestra conductors, music composers, instrumentalists, organists, vocalists

Employment growth for these occupations should be above average into the mid-1990s, with about 9,400 job openings, most of which will be vacancies created by individuals leaving the work force. Labour market conditions have been favourable in the past few years, and the job vacancy rate has been above the average for all occupations.

Geographic Distribution of Employment – 1981 (%)

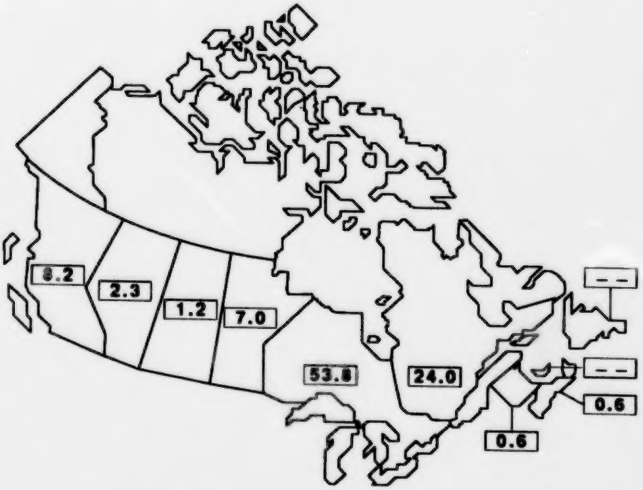


3334 Choreographers and Dancers

Typical occupations: chorus, classical ballet and tap dancers

Employment growth for dancers and choreographers should be above average over the next eight years, with about 600 job openings occurring up to 1995. Labour market conditions have been average, but with the decrease in the number of temporary foreign workers more job opportunities are being created for Canadians.

Geographic Distribution of Employment – 1981 (%)

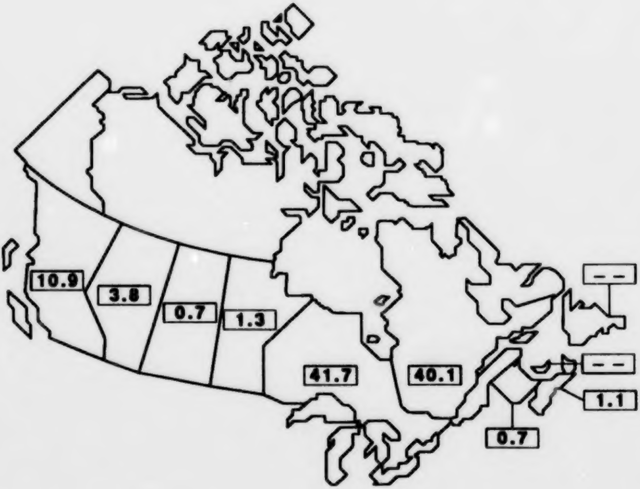


3335 Actors/Actresses

Typical occupations: comedians, impersonators, radio and theatrical performers

Employment growth for this occupation should be above average over the next eight years, with approximately 1,200 job openings, most of which will be created by people leaving the work force. Labour market conditions have not been very favourable in the past few years. Although the unemployment rates appear to be lower than average, many actors and actresses work in other jobs while they search for acting work.

Geographic Distribution of Employment – 1981 (%)

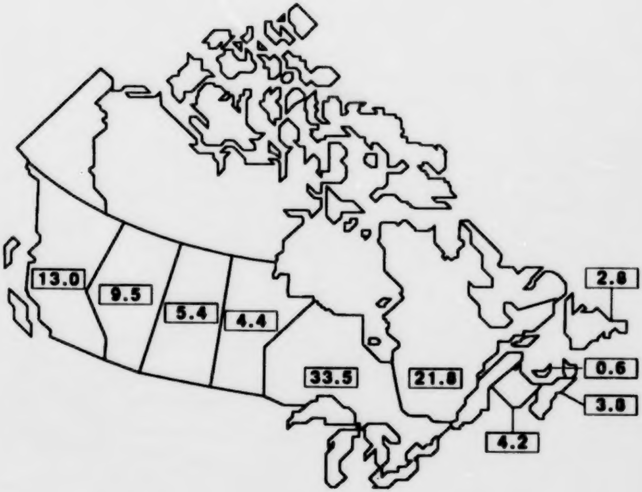


3337 Radio and Television Announcers

Typical occupations: broadcasters, disc jockeys, sportscasters, newscasters

There should be about average employment growth for this group into the mid-1990s, with about 1,900 job openings caused by departing personnel during the next eight years. Labour market conditions in the past few years have not been favourable, but high turnover in this field could produce more jobs than predicted.

Geographic Distribution of Employment – 1981 (%)

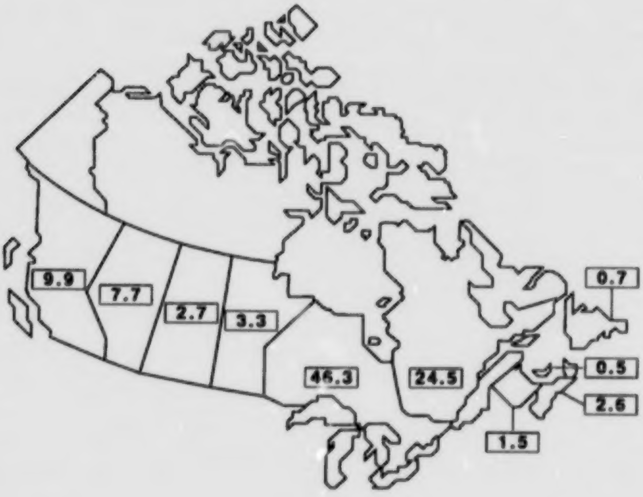


3351 Writers and Editors

Typical occupations: advertising editors, copy writers, columnists, news reporters, press writers, film editors

The employment outlook for this group calls for about average growth to 1995. Approximately 11,000 writers and editors will be needed over the next eight years to fill new jobs and to replace departing personnel. Labour market conditions for writers and editors rank very favourably. In 1986, the unemployment rate was low in this category.

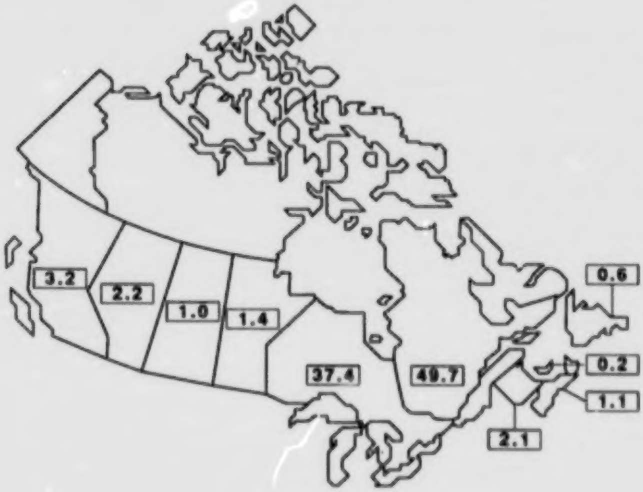
Geographic Distribution of Employment – 1981 (%)



3355 Translators and Interpreters

The employment outlook for these occupations calls for about average employment growth to 1995, with part-time employment more predominant than in other occupations. Approximately 2,500 translators and interpreters will be needed to fill new jobs and replace personnel in existing jobs in the next eight years. Labour market conditions in the past few years have been slightly better than the average. Employment in this occupational group is not particularly vulnerable to changes in business conditions.

Geographic Distribution of Employment – 1981 (%)

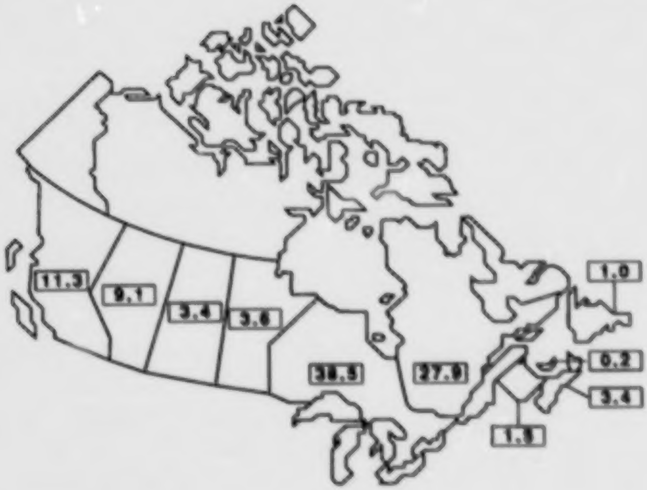


3370 Coaches, Trainers and Instructors

Typical occupations: athletic coaches and trainers, skating, skiing, swimming instructors, physical training directors

The employment outlook for this group calls for above-average growth to 1995, with about 5,700 workers expected to replace those leaving the workforce. About 2,600 additional workers will be required for new jobs. The labour market situation for coaches, trainers and instructors has been better than for most occupations, with a lower-than-average rate of unemployment.

Geographic Distribution of Employment – 1981 (%)

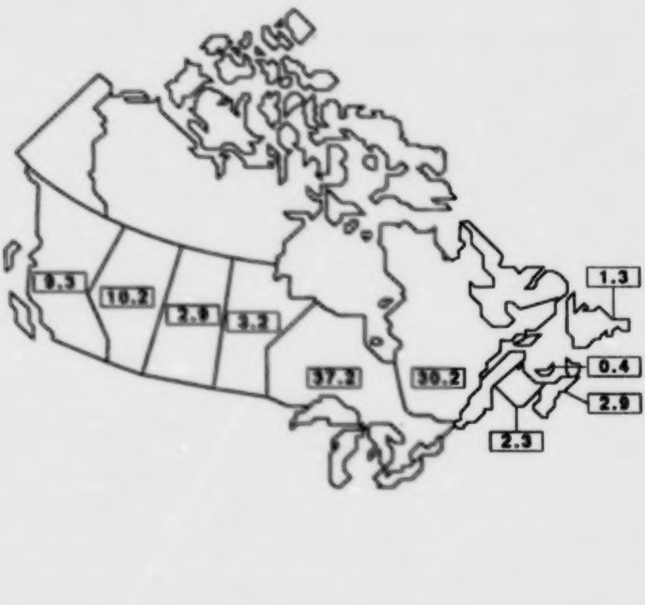


4111 Secretaries and Stenographers

Typical occupations: clerk-stenographers, departmental secretaries, legal secretaries, medical secretaries

The employment outlook for this occupational group calls for about average growth over the next eight years. Because of the large proportion of employees under 54 years of age, job replacement requirements will be about average. Employment in this predominately female occupation is steady year-round, with about one job in five being part-time.

Geographic Distribution of Employment – 1981 (%)

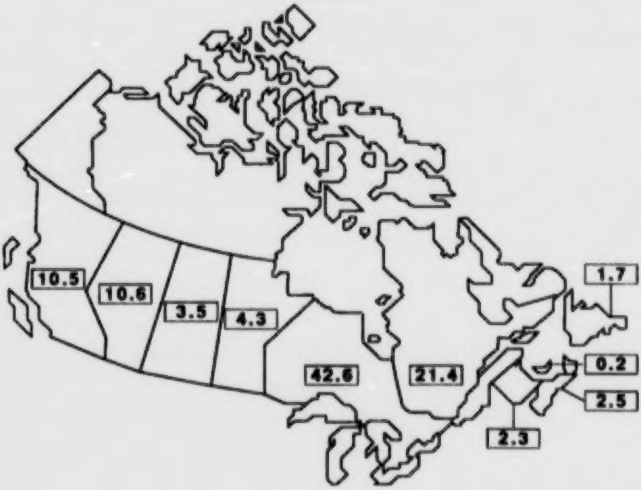


4113 Typists and Clerk-Typists

Typical occupations: teletypists, transcribing-machine operators, word-processing operators, clerk-typists

The employment outlook for this group calls for about average growth to 1995. About 10,200 new jobs will be created, and replacement requirements will provide about 54,000 entry positions over the same period. Unemployment rates have been improving in these occupations but are still not as favourable as they were in 1981. Part-time employment is commonplace, occurring in about two jobs out of nine. This occupational group is composed almost entirely of women.

Geographic Distribution of Employment – 1981 (%)

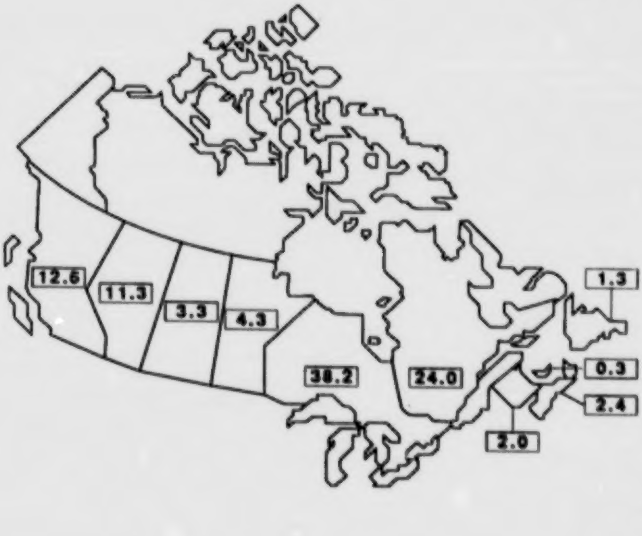


4131 Bookkeepers and Accounting Clerks

Typical occupations: accounting clerks, audit clerks, bookkeeping clerks, payroll clerks

The employment outlook for these occupations calls for about average growth to 1995. Nearly 44,400 new jobs and 137,000 replacement job openings are expected over the next eight years. At present, labour market conditions are favourable for bookkeepers, although not to the same extent as before the recession in 1982.

Geographic Distribution of Employment – 1981 (%)

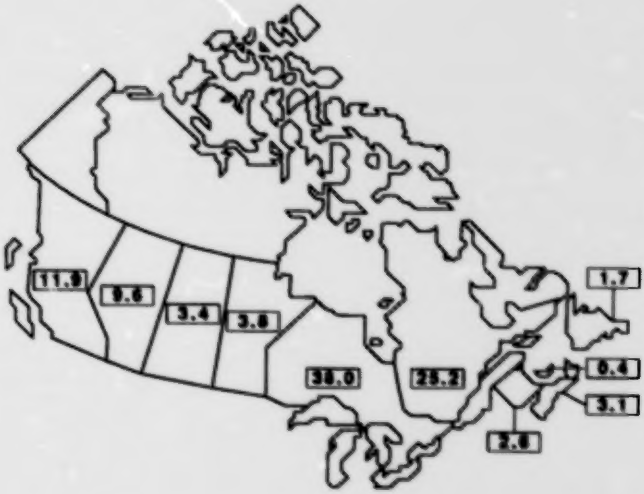


4133 Cashiers and Tellers

Typical occupations: bank tellers, disbursement clerks, clerical cashiers, grocery checkers

The employment outlook for this group calls for above-average growth into the mid-1990s; approximately 30,000 new job openings are predicted in the next eight years. Since only a small proportion of cashiers and tellers fall in the 54-plus age group, few replacement openings are expected, though turnover for other reasons is high. Employment tends to be stable throughout the year despite swings in the overall business climate. Part-time work is prevalent in this occupation.

Geographic Distribution of Employment – 1981 (%)

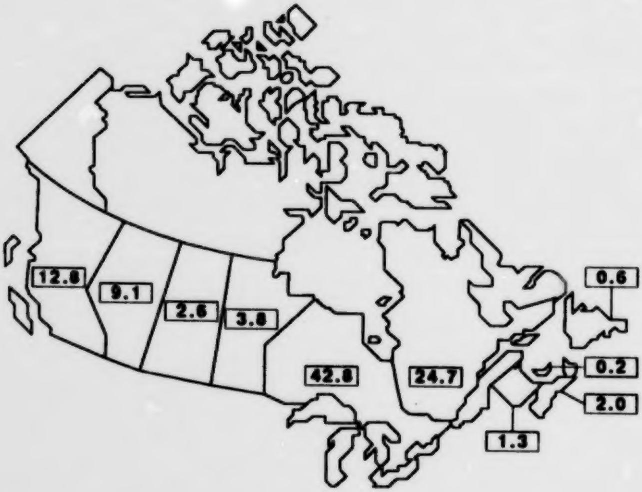


4135 Finance Clerks

Typical occupations: insurance, bank and real-estate clerks

The employment growth for these occupations should be about average through to 1995. Approximately 4,900 new job openings are anticipated during the next eight years, and replacement demand is expected to generate 10,000 additional openings. Current labour market conditions are favourable for finance clerks, although employment growth has slowed as a result of increased office automation.

Geographic Distribution of Employment – 1981 (%)

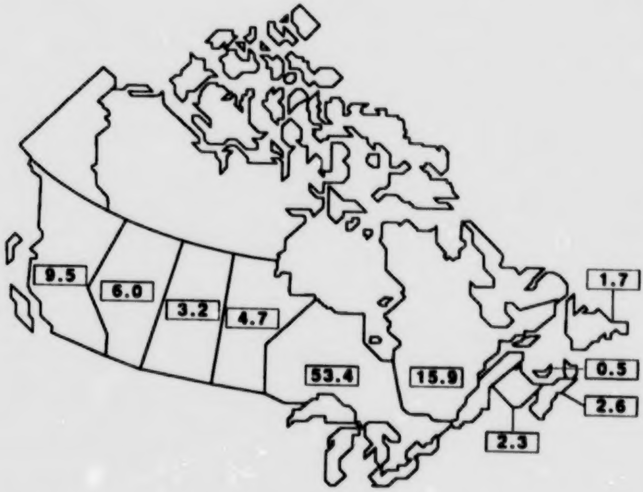


4137 Statistical Clerks

Typical occupations: actuarial, advertising, statistical research and census clerks

The employment outlook for these occupations calls for less-than-average growth into the mid-1990s. The introduction of new computer technologies may be a factor in limiting employment growth. Although unemployment has risen since 1981, it is still below the average. However, approximately 800 new job openings and 4,800 additional replacement job openings are expected to become available in the next eight years.

Geographic Distribution of Employment – 1981 (%)

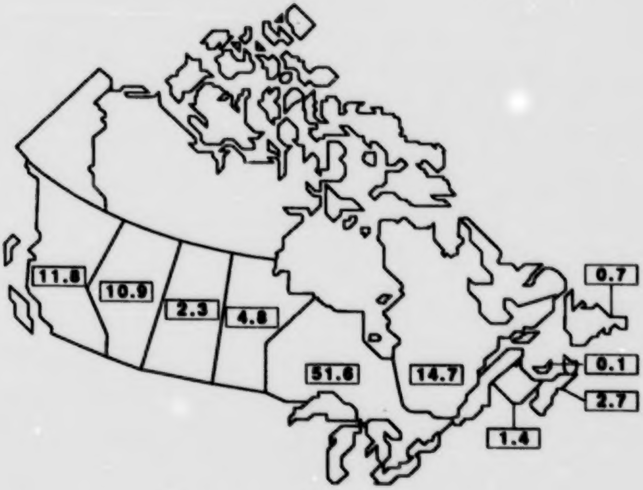


4140 Supervisors: Data-Processing Operators

Typical occupations: addressograph supervisors, supervisors of office machine operators, supervisors of computer operators, tabulating supervisors

The employment outlook for this group calls for about average growth over the next eight years. They have one of the lowest unemployment rates in the labour market. Approximately 800 new job openings are expected to become available for EDP supervisors to 1995. Since only a small proportion is in the 54-plus age group, very few of these openings will be to replace personnel.

Geographic Distribution of Employment – 1981 (%)

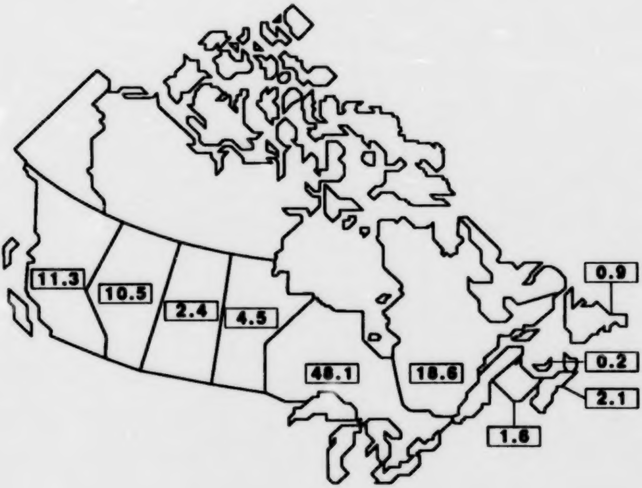


4143 Data-Processing Operators

Typical occupations: computer operators, data processors, keypunch operators

Employment growth for this group should be average into the mid-1990s. Approximately 20,900 job openings, mostly new jobs rather than replacement positions, will be generated in the next eight years. At present, data-processing operators have the same umemployment rate as the labour force at large. Technological changes will continue to affect job prospects in this field.

Geographic Distribution of Employment – 1981 (%)

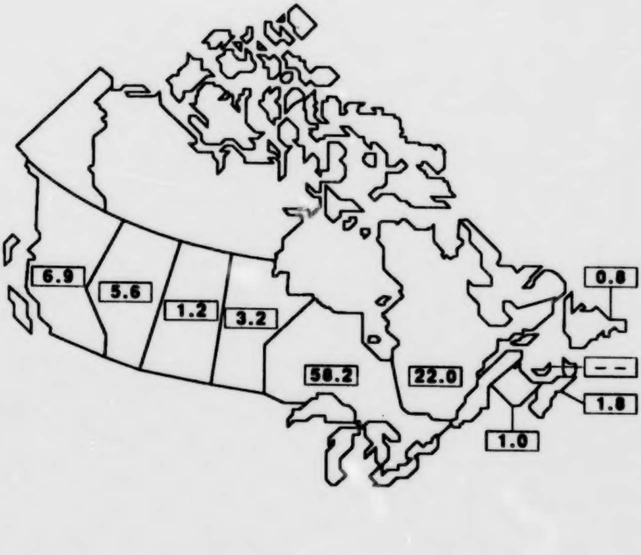


4151 Production Clerks

Typical occupations: production co-ordinators, schedule clerks, expediters

Since 75% of production clerks work in the manufacturing and trade sectors, this group tends to be affected by swings in economic conditions. Current projections indicate that employment is expected to increase by 10% over the next eight years. This group has lower-than-average unemployment, with approximately 1,800 new jobs and 8,000 replacement openings occuring by 1995.

Geographic Distribution of Employment – 1981 (%)

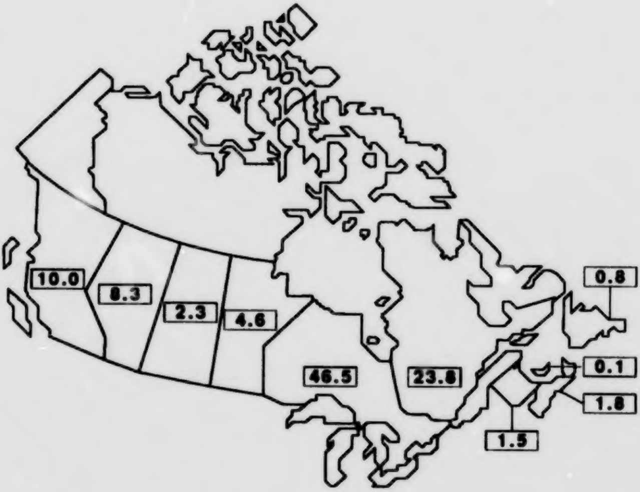


4153 Shipping and Receiving Clerks

Typical occupations: delivery checkers, freight clerks, warehouse receivers

Moderate employment growth is projected for the future of this occupation. About 8,200 new shipping clerk job openings are anticipated over the next eight years. Replacement job openings are also expected to be numerous, reflecting the high rate of turnover in this category. Labour market conditions for shipping clerks are at present just slightly better than in other occupations.

Geographic Distribution of Employment – 1981 (%)

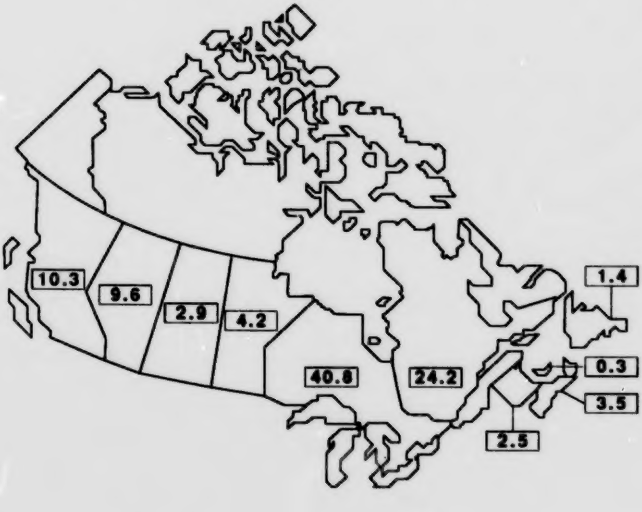


4155 Stock Clerks

Typical occupations: central supply clerks, inventory clerks, material keepers, purchasing clerks, stockroom attendants

Employment growth is expected to be average in this occupation, although not as strong as growth predicted for the overall economy. A total of 9,600 new jobs are projected for the next eight years, and 38,000 positions will be opened up by individuals leaving the work force. Current labour market conditions are better than average for stock clerks, although unemployment rates remain higher than pre-recession levels.

Geographic Distribution of Employment – 1981 (%)

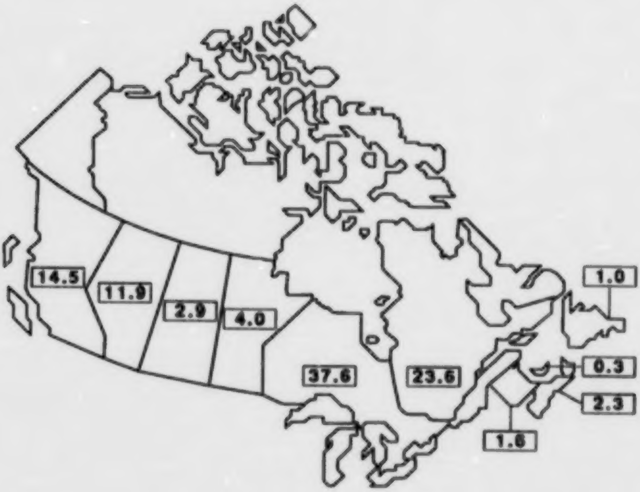


4171 Receptionists and Information Clerks

Typical occupations: admitting clerks, appointment clerks, telephone clerks

The employment outlook for this occupation calls for about average growth over the next eight years. By 1995, there should be more than 11,000 new job openings and an additional 28,000 jobs to replace personnel leaving receptionist positions. The fairly high current rates of unemployment reflect the stiff competition for job vacancies.

Geographic Distribution of Employment – 1981 (%)

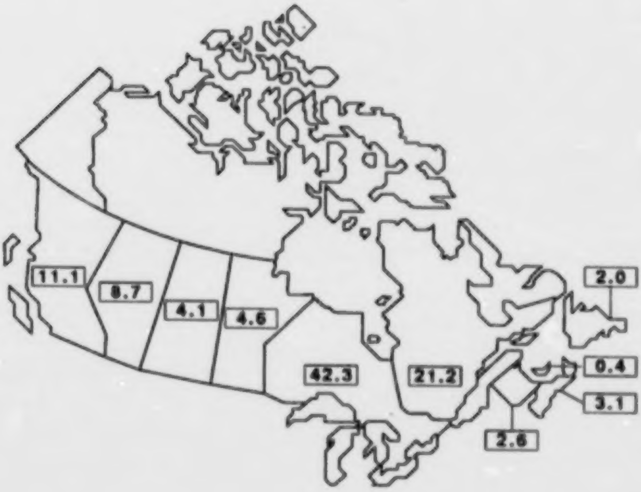


4173 Mail and Postal Clerks

Typical occupations: mail sorters, postal office clerks, wicket-postal clerks

Job prospects in this occupation should be about average over the next eight years. Approximately 5,700 new job openings are expected to become available by 1995. The higher-than-average proportion of mail-postal workers in the 54-plus age group will create a good number of replacement openings. In 1986, current rates of unemployment in this category were among the lowest in the country.

Geographic Distribution of Employment – 1981 (%)

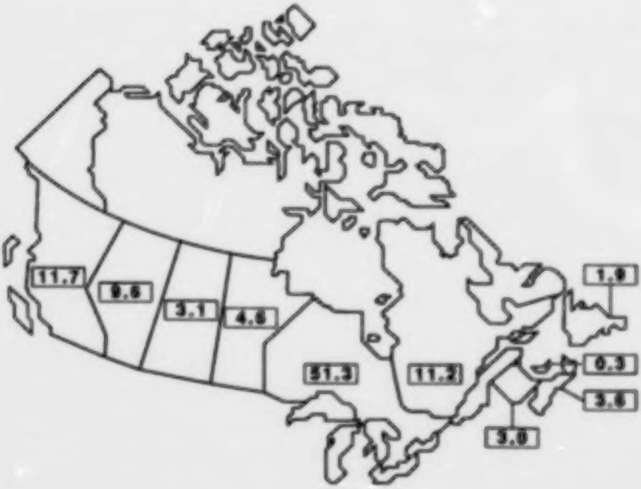


4192 Claims Adjusters

Typical occupations: adjusters, compensation agents, repair clerks

Job prospects in this occupation should be about average over the next eight years. Approximately 900 new job openings should become available. Since an average proportion of claims adjusters are in the 54-plus age group, a moderate number of job openings will be created through retirements. Labour market conditions for this occupational group are quite favourable: during the 1981 to 1986 period, claims adjusters had a below-average unemployment rate.

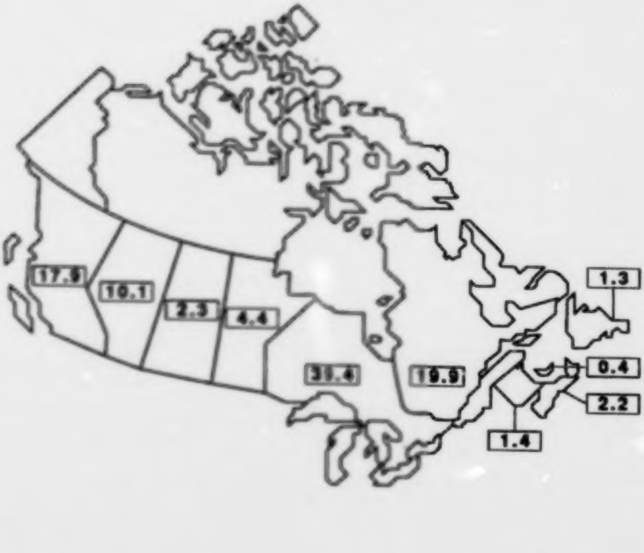
Geographic Distribution of Employment – 1981 (%)



4193 Travel and Ticket Agents

The employment outlook for this occupation calls for below-average growth into the mid-1990s. Nearly 8,400 job openings (new and replacement) are expected within the next eight years. Job prospects in the occupations tend to be very sensitive to economic conditions. Within a ten-year span, the proportion of part-time work in this occupational group has tripled to 15% in 1981.

Geographic Distribution of Employment – 1981 (%)

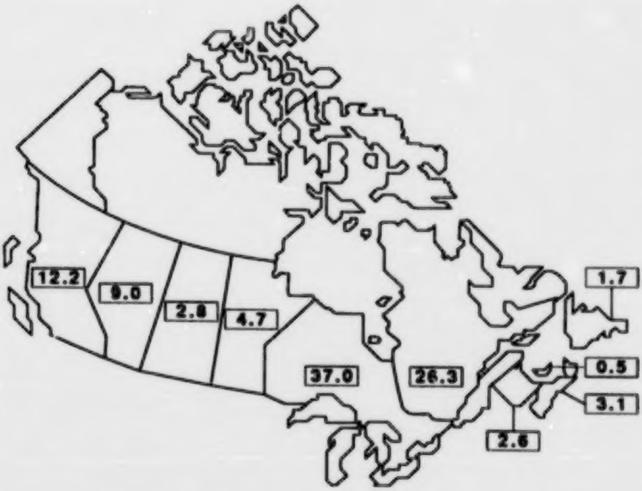


4197 General Office Clerks

Typical occupations: administrative clerks, forms control clerks, hospital clerks

The employment outlook for this occupation calls for average growth over the next eight years with approximately 97,000 jobs opening up. For every six openings, five will be replacement jobs. Current adverse labour market conditions are causing higher unemployment rates among general office clerks than in the labour market at large.

Geographic Distribution of Employment - 1981 (%)

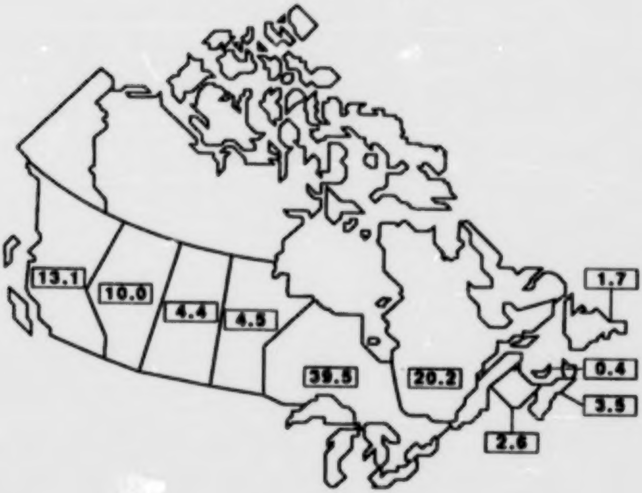


5130 Supervisors: Sales Occupations, Commodities

Typical occupations: antique dealers, cattle dealers, lumber dealers, sales supervisors, wholesalers, importers, store proprietors

Average employment growth for this group is expected over the coming eight years, with 12,000 new job openings anticipated. Moderate interest rate levels and growing disposable incomes are expected to improve the employment climate for occupations associated with merchandise sales. Current labour market conditions are favourable for this occupational group. Rates of unemployment for sales and commodities supervisors in 1986 were lower than the average for all occupations.

Geographic Distribution of Employment - 1981 (%)

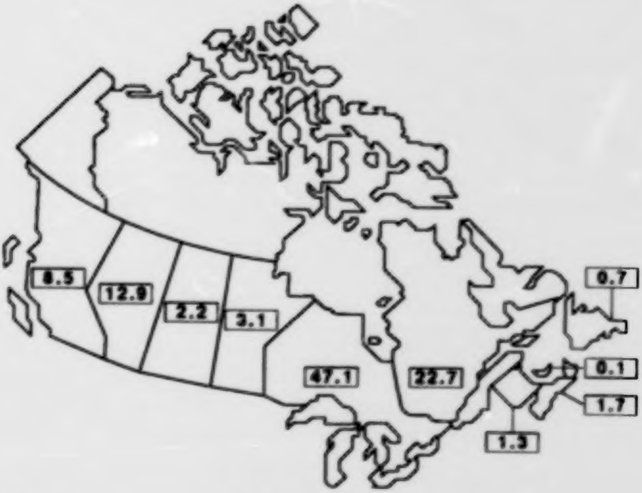


5131 Technical Sales Occupations

Typical occupations: data-processing and electronic equipment sales representatives, technical and implement salespersons, sales engineers

During the 1970s, employment for this group increased at twice the rate of all occupations, but this trend was reversed during the first half of the 1980s. Current projections indicate that employment growth will be modest in the near future, with approximately 4,900 total jobs becoming available in the next eight years. Nearly 3,800 of these will be replacement jobs.

Geographic Distribution of Employment – 1981 (%)

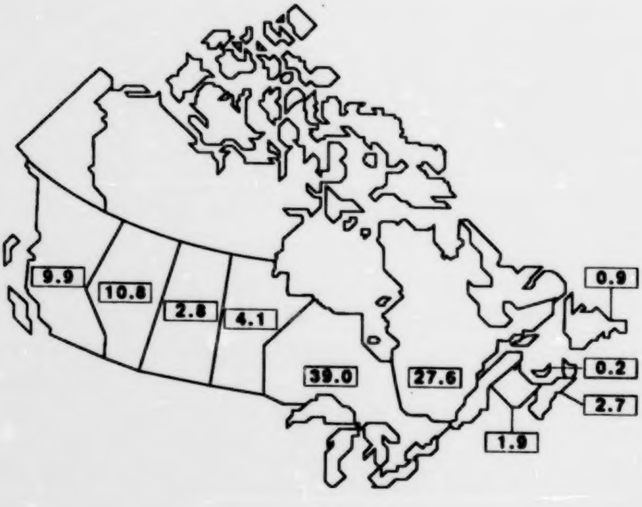


5133 Commercial Travellers

Typical occupations: commercial agents, drug representatives, footwear salespersons, fuel salespersons, furniture salespersons

Current projections indicate modest employment growth of 8.9% to 1995 with about 9,200 new job openings for this group. Nearly 36,000 vacancies will result from personnel leaving the occupation and by the high rate of job turnover. Commercial travellers have been faring better than most occupations in the labour market to date in the 1980s.

Geographic Distribution of Employment – 1981 (%)

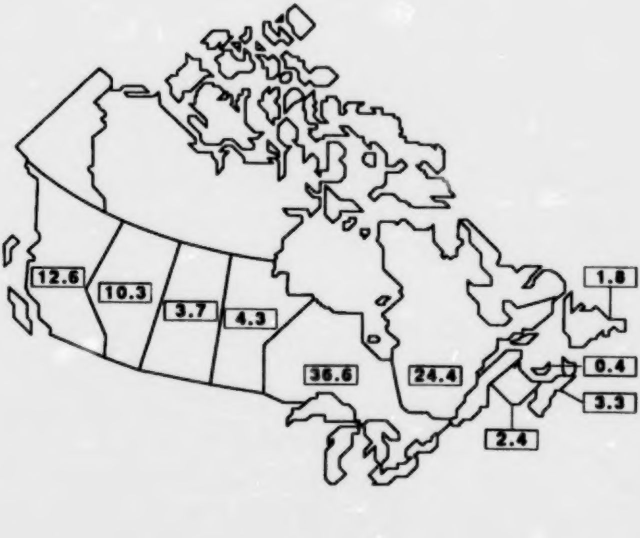


5135 Salespeople, Commodities

Typical occupations: bakery sales clerks, furniture salespersons, automobile salespersons

The substantial employment increases enjoyed by this group during the 1970s will decelerate somewhat, with about 51,200 new jobs in the next eight years. About 87,000 vacancies will result from personnel leaving the occupation and by the high rate of turnover among sales clerks. Many of these jobs will be part-time.

Geographic Distribution of Employment – 1981 (%)

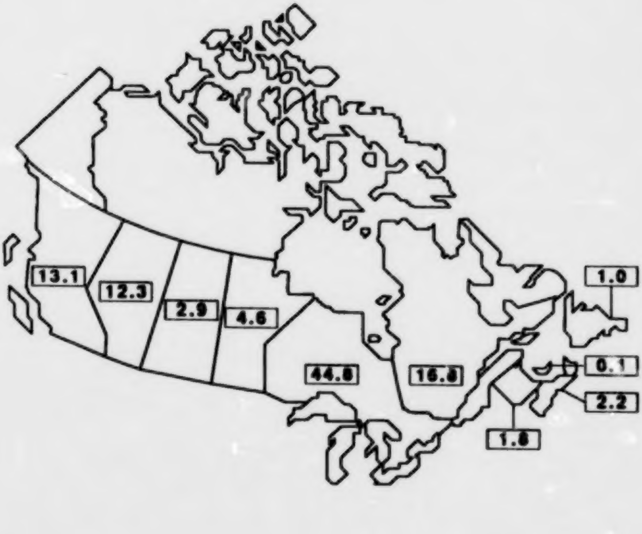


5170 Supervisors, Sales and Services

Typical occupations: bond brokers, financiers, investment brokers, securities traders

There should be an average employment growth rate in the next eight years, with about 14,700 job openings, a number of which will be replacement jobs. These occupations are faring well in the labour market, with an unemployment rate well below the average.

Geographic Distribution of Employment – 1981 (%)

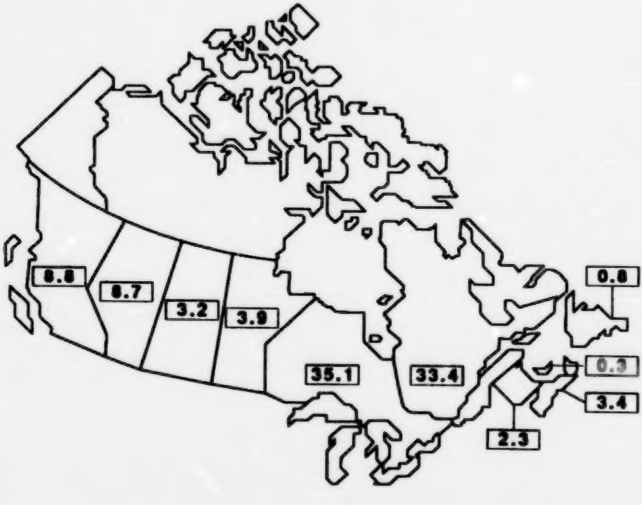


5171 Insurance Sales

Typical occupations: annuity representatives, claim inspectors, insurance appraisers, policy writers

Future employment growth for this group is expected to be about average. Approximately 26,900 total job openings are anticipated over the next eight years, with most of these openings the result of replacement requirements. Insurance salespersons, as an occupational group, are not overly sensitive to economic circumstances. Currently, this group is faring well in the labour market, with fairly low unemployment.

Geographic Distribution of Employment – 1981 (%)

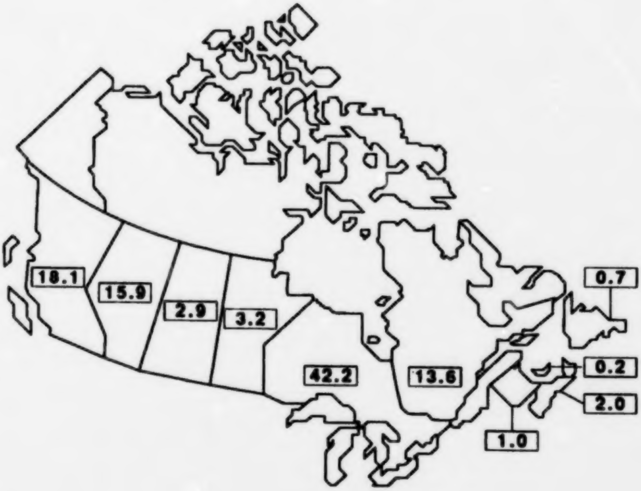


5172 Real Estate Sales

Typical occupations: land appraisers, real estate agents, rental agents

During the 1970s, employment in this category increased more quickly than the average of all occupations. Employment should grow at an average rate in the next eight years, with about 51,000 total openings. Of these, nearly 35,000 will result from personnel leaving the work force. If current interest rates remain stable, the employment outlook for the real estate sector should continue to be good.

Geographic Distribution of Employment – 1981 (%)

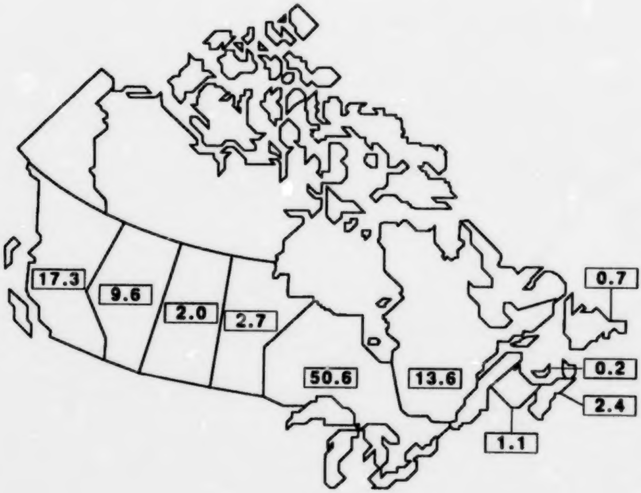


5173 Sales Agents and Traders, Securities

Typical occupations: bond traders, mutual fund sales agents, investment dealers, trust representatives

Employment growth in securities sales has been stable throughout the first half of the 1980s, and should increase by 11% for a total of 1,400 new jobs in the next eight years. To replace existing personnel, 5,300 additional jobs will come open because of high job turnover and because a higher-than-average proportion of securities dealers are in the 54-plus age group.

Geographic Distribution of Employment – 1981 (%)

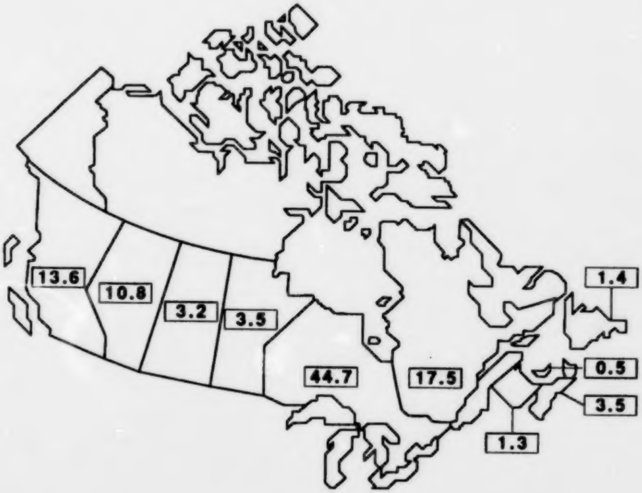


5174 Advertising Sales

Typical occupations: advertising agents, sales representatives, advertising brokers, time salespersons

This group had slightly above-average employment growth during the first half of the 1980s. Employment should grow by 8.5% over the next eight years, with approximately 800 new jobs and another 2,900 replacement job openings. Labour market conditions were good for advertising salespeople in 1986; their unemployment rate was much lower than that recorded for all occupations. They consistently fared better than most throughout the early 1980s.

Geographic Distribution of Employment - 1981 (%)

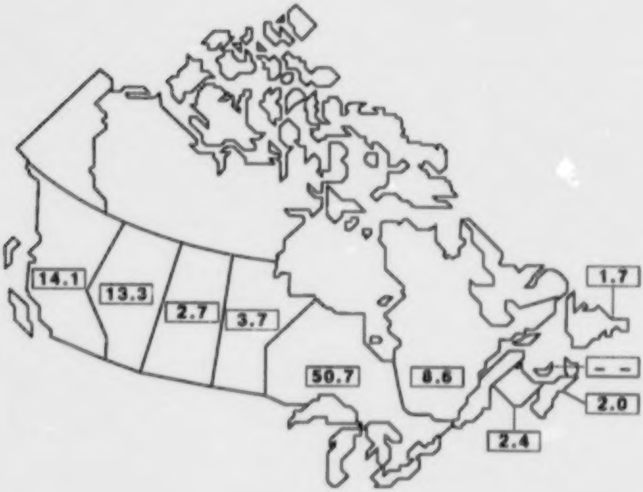


5177 Business Services Sales

Typical occupations: collection-agency salespeople, freight representatives, hotel service sales representatives, security services sales representatives

Current projections forecast employment growth of 7.6% and 400 new jobs over the next eight years for this group. About 1,600 openings will result from personnel leaving the work force. Although this group has had a higher-than-average unemployment rate in recent years, labour market conditions are improving.

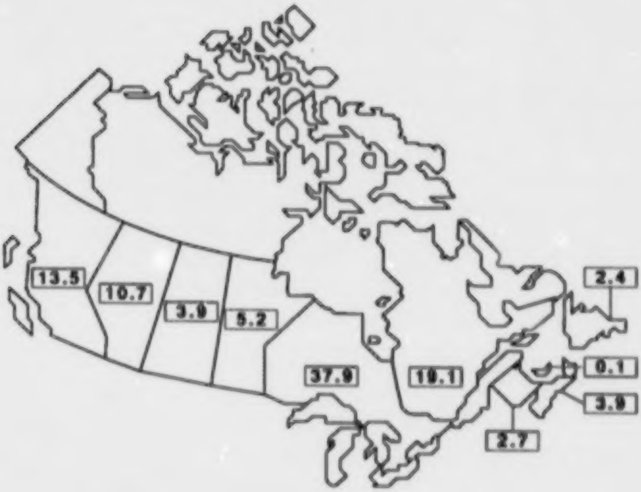
Geographic Distribution of Employment – 1981 (%)



6111 Fire-Fighters

The employment outlook for these occupations calls for below-average growth to 1995. Job replacement openings are expected to be below average, although they will account for most of the 11,600 openings forecast for the next eight years. According to the 1981 census, only 1% of fire-fighters were women but this proportion will probably increase with recent changes in recruitment requirements. Labour market conditions for fire-fighters were about average in 1986.

Geographic Distribution of Employment – 1981 (%)

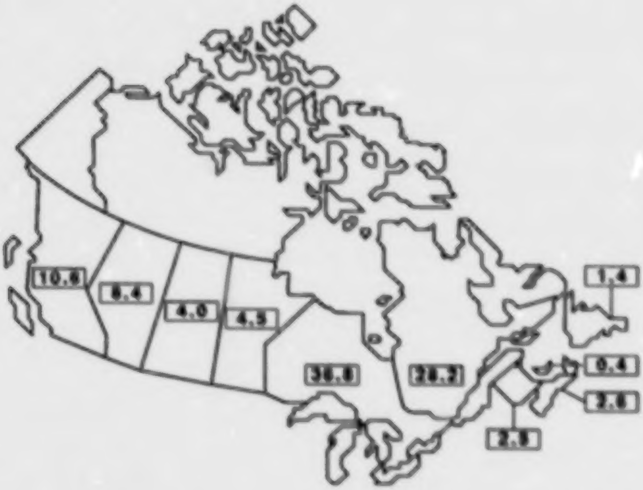


6112 Police Officers and Detectives, Government

Typical occupations: all law enforcement personnel in Canada, including provincial police constables and detectives, as well as the RCMP

The employment outlook for this group calls for below-average growth into the mid-1990s, with an average number of replacement job openings. A total of 21,800 additional police officers will be required over the next eight years. Labour market conditions for police officers declined in 1986 and are still not as favourable as in the 1970s. However, relative to other occupations, they rank among the best.

Geographic Distribution of Employment – 1981 (%)

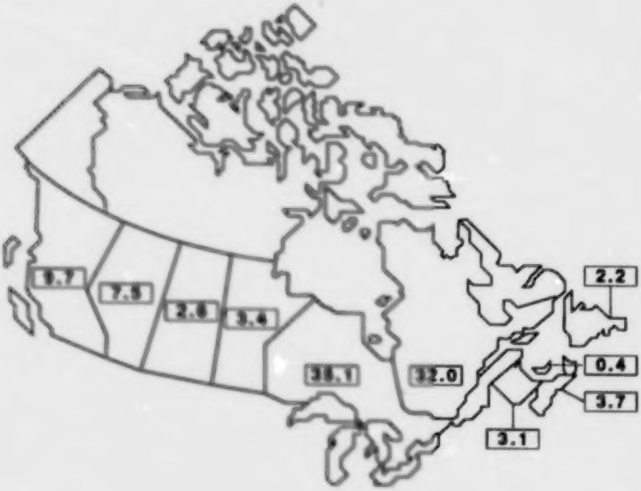


6115 Guards and Other Security Occupations

Typical occupations: correctional officers, watchmen, plant guards, school-crossing guards

Employment growth for this group should be about average over the next eight years, with above-average numbers of job replacement openings. Approximately 60,000 additional correctional officers and other security personnel will be required in all over the next eight years. The proportion of women in this group increased dramatically to 18% in 1981. Although labour market conditions improved in 1986, they are still only average in comparison with other occupations.

Geographic Distribution of Employment – 1981 (%)

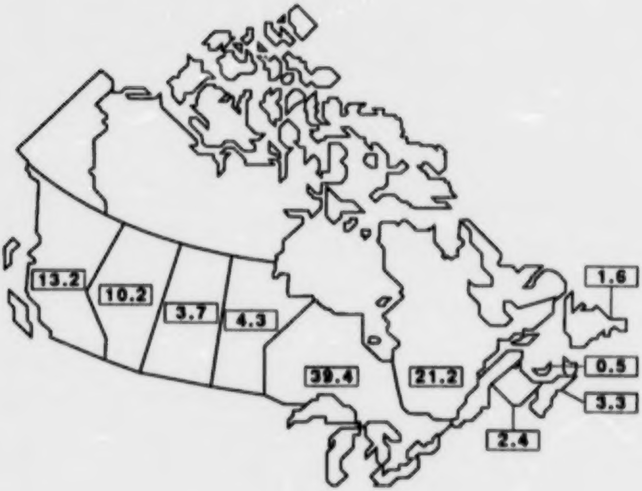


6120 Supervisors: Food and Beverage Occupations

Typical occupations: cafeteria supervisors, head chefs, head waiters/waitresses, maîtres d'hôtel

The employment growth for these occupations should be above average with approximately 47,300 additional food-service managers required to fill new jobs and to replace personnel over the next eight years. Labour market conditions improved in 1986 over the preceding few years, but they are still not as good as before the 1981-1982 recession. Relative to labour market conditions for other occupations, however, they rank among the most favourable.

Geographic Distribution of Employment - 1981 (%)

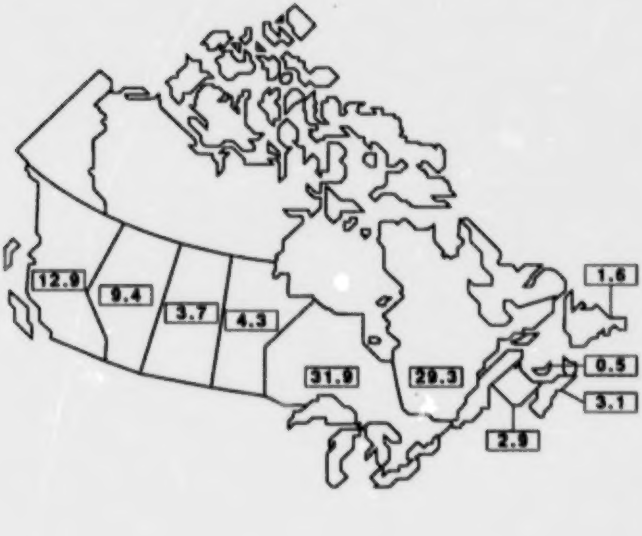


6121 Chefs and Cooks

Typical occupations: institutional, short-order and specialty cooks and chefs

Employment growth in this group was extremely rapid during the 1970s and has not really declined since; projected growth is expected to be well above the average. The Canadian economy will need approximately 100,000 additional workers to fill new and existing positions over the next nine years. Labour market conditions for chefs and cooks improved in 1986 over the previous few years and, compared to job market conditions for other occupations, rank among the most favourable.

Geographic Distribution of Employment – 1981 (%)

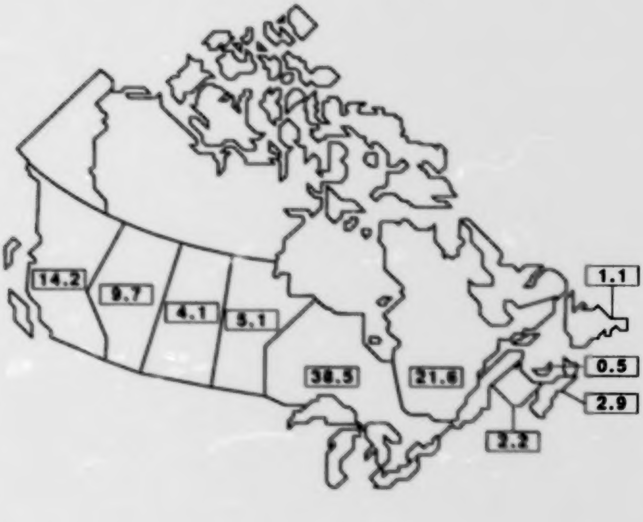


6125 Food and Beverage Servers

Typical occupations: range from bus boy and girl and car hop to formal dining room waiter or waitress

Employment growth in this group was one of the highest during the 1970s, but has since slowed down, although growth should still be well above the average for all occupations. Approximately 153,000 additional waiters and waitresses will be required to fill new jobs and replace personnel in existing jobs over the next seven years. In such a fast growing service industry, there will be a lot of career opportunities.

Geographic Distribution of Employment – 1981 (%)

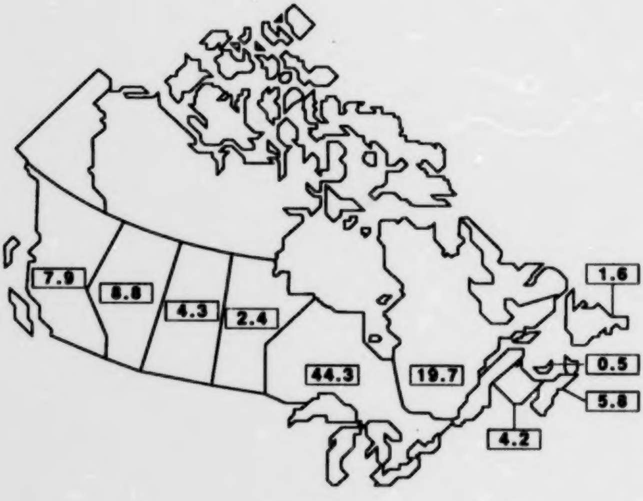


6141 Funeral Directors and Embalmers

Typical occupations: funeral directors, embalmers, cremators, morticians, undertakers

Employment growth is expected to be less than the average for all occupations. Most job opportunities in the next eight years will be from vacancies created by people leaving the work force. Approximately 2,900 additional funeral directors and embalmers will be required to fill new and existing jobs. Labour market conditions currently rank among the best.

Geographic Distribution of Employment – 1981 (%)

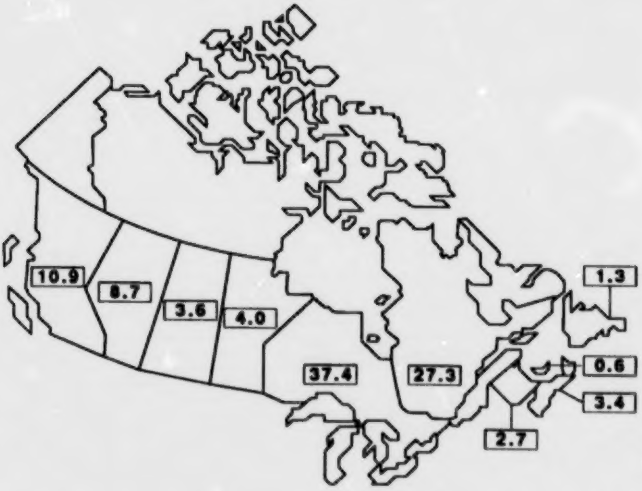


6143 Barbers and Hairdressers

Typical occupations: beauty operators, beauticians, cosmetologists, haircutters

Employment growth in this group is expected to remain below the average for all occupations. Job openings created by individuals leaving the work force will be fewer than the average, although they will comprise a large proportion of the 38,400 job openings expected over the next eight years. Women make up most of this group. Compared to labour market conditions for other occupations, those for hairdressers and barbers rank favourably. Employment opportunities are best in large- and medium-size urban areas.

Geographic Distribution of Employment - 1981 (%)

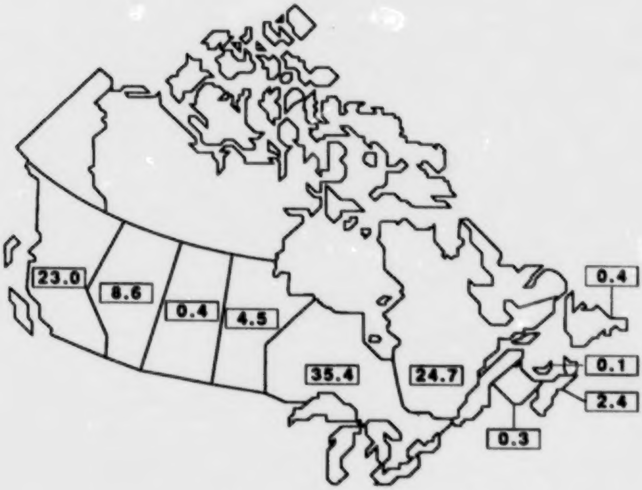


6145 Travel Attendants

Typical occupations: flight attendants, all types of hostesses and stewards in the tourism industry

Employment in this group suffered recession-related losses during the early 1980s. Up until 1995, it is expected to remain static. Nearly all the expected 3,100 job openings in the next eight years will result from replacement demand. Labour market conditions for this group have been about average since 1981, but with the deregulation of transportation, prospects may improve.

Geographic Distribution of Employment - 1981 (%)

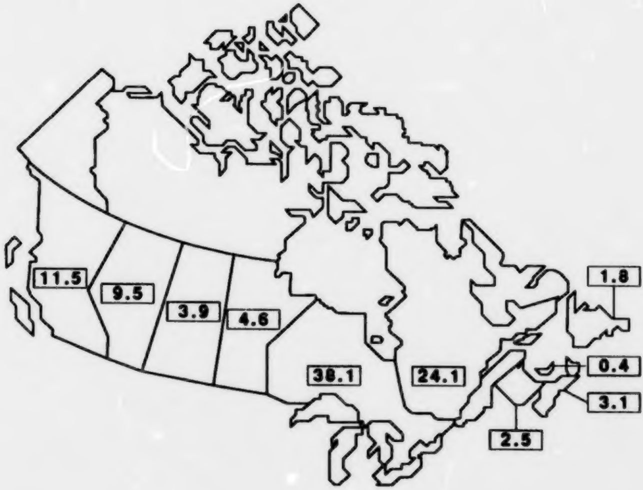


6191 Janitors, Charworkers and Cleaners

Typical occupations: building operators, sanitation engineers, superintendents, floor cleaners

Employment growth in this group will probably equal the average for all occupations during the next eight years. Approximately 179,100 janitors will be required to fill new jobs and to replace departing personnel up to 1995. Labour market conditions have improved over the past few years. Relative to labour market conditions for other occupations, those for janitors rank about average.

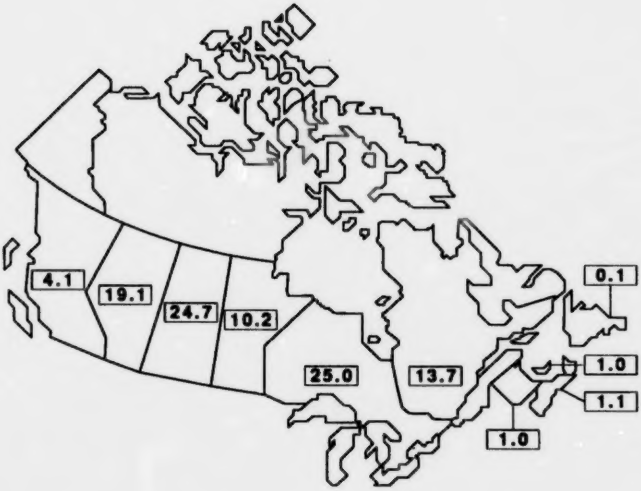
Geographic Distribution of Employment – 1981 (%)



7113 Livestock Farmers
7115 Crop Farmers
7119 Farmers

The trend toward larger but fewer farms slowed down employment in the 1970s, and current levels are believed to be at a temporary minimum for farmers, with some 12,500 new jobs (mostly replacement) over the next eight years. Farm incomes are more sensitive to environmental conditions than to economic conditions. Government regulation of some farming activities (e.g., poultry, eggs, dairy) may reduce the scope of operations by a farmer, but ensures a protected stable income.

Geographic Distribution of Employment – 1981 (%)

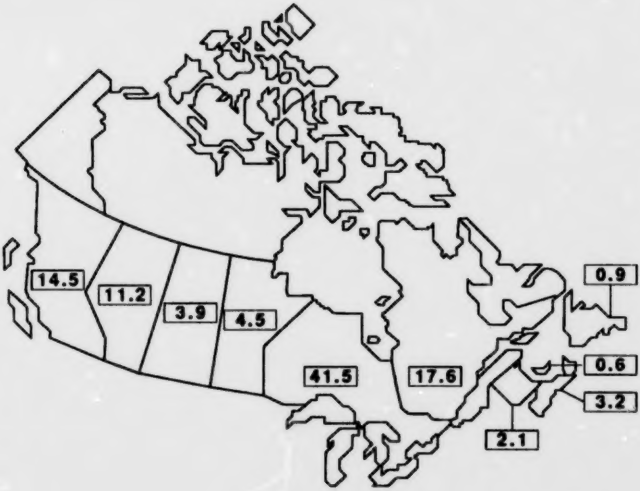


7195 Nursery Workers

Typical occupations: greenskeepers, landscape gardeners, flower growers, grounds maintenance workers

Job prospects for this group should be about average over the next eight years, which differs from the faster-than-average growth of employment rate in the 1970s. Some 7,200 new jobs are anticipated through to 1995. A great many nursery and landscaping jobs are part-time, and highly seasonal with employment peaks during the warm weather months.

Geographic Distribution of Employment - 1981 (%)

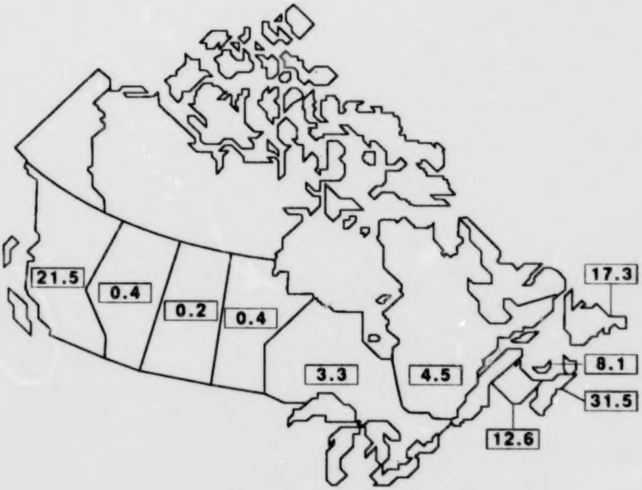


7311 Fishing Vessel Officers

Typical occupations: captains, boatswains, mates and skippers

The employment outlook for these occupations calls for above-average growth over the next eight years, an improvement on the average pace during the 1970s and early 1980s. Up to 1995, approximately 1,900 people will be needed to fill new jobs and to replace personnel leaving the work force.

Geographic Distribution of Employment – 1981 (%)

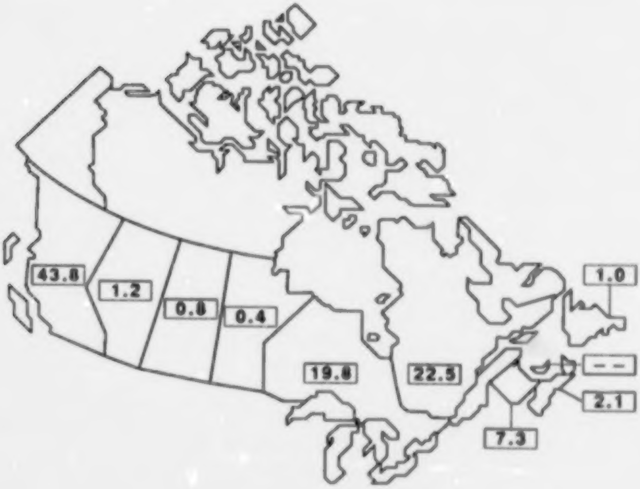


7516 Log Inspectors, Graders and Scalers

Typical occupations: log graders, timber scalers, tree scalers

Job prospects for this group will probably be below average over the next eight years, continuing the slow employment growth of the 1970s and early 1980s. About 1,100 to 1,400 log inspectors will be needed up to 1995, most of whom will be replacing current personnel. Labour market conditions have not been very good in the past few years: there have been few jobs, and unemployment has been well above the average.

Geographic Distribution of Employment – 1981 (%)

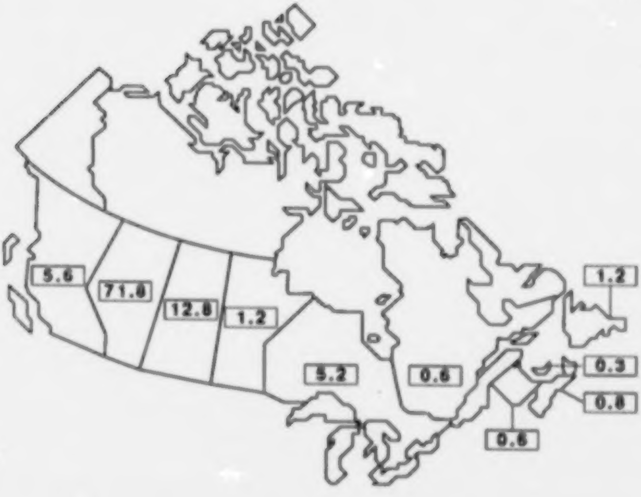


7711 Rotary Well-Drillers

Typical occupations: oil drillers, seismograph drillers, pipe pullers, service rig operators

The employment outlook for this group calls for above-average growth over the next eight years. Some 3,100 persons will be needed to fill new jobs and to replace departing workers. Labour market conditions in these occupations rank among the least favourable. This should change, however, because improvements in industry trends suggest an increase in the demand for drillers over the next eight years.

Geographic Distribution of Employment – 1981 (%)

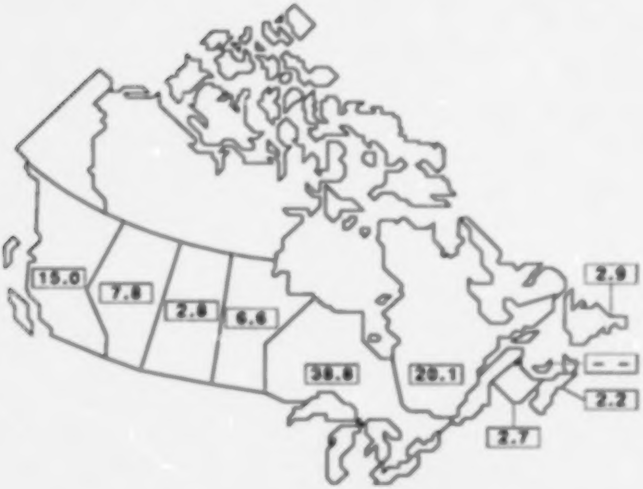


7713 Rock and Soil Drillers

Typical occupations: air-drill operators, blast-hole drillers, auger operators, coal drillers

Employment growth for these occupations should be above average over the next eight years, unlike the situation in the 1970s and early 1980s, when employment in the Canadian mining industry fell off significantly. About 7,900 drillers will be needed to 1995 to fill new jobs and to replace departing personnel.

Geographic Distribution of Employment – 1981 (%)

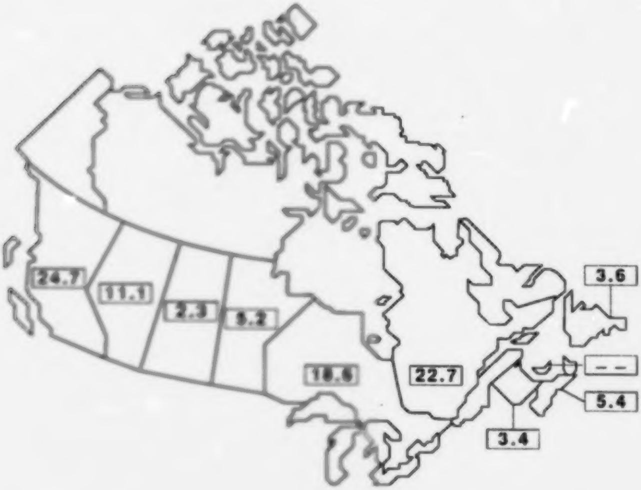


7715 Blasting Occupations

Typical occupations: oil-well shooters, dynamiters, chute blasters, seismograph shooters

With average employment growth forecasted to 1995, there should be about 1,500 job openings in total over the next eight years. Most of these will be created by departing personnel; few of them are new. Since the 1981-1982 recession, labour market conditions have not been favourable for this group, but they are expected to improve, and jobs should become more available.

Geographic Distribution of Employment – 1981 (%)

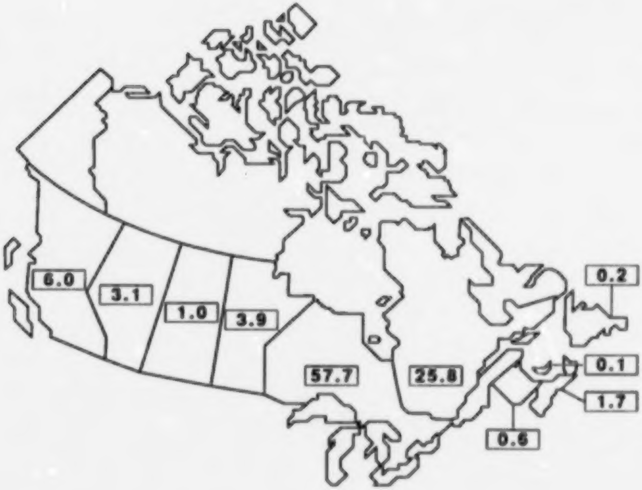


8137 Moulders, Coremakers and Metal Casters

Typical occupations: bench moulders, die casters, floor moulders, metal casters

Despite the limiting effects of technology (out-moded processes and longer-lasting materials), the growing number of applications for casting will mean better-than-average employment growth for moulders over the next eight years. Because the supply of workers has not kept full pace with demand, current market conditions are slightly better than average. Most of the work in this occupation is full-time and stable throughout the year.

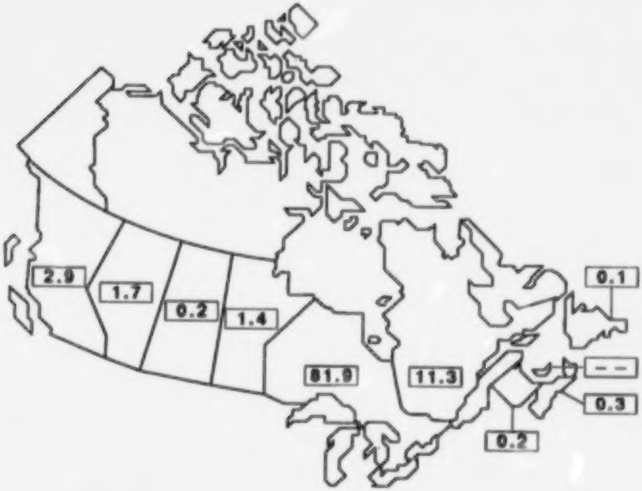
Geographic Distribution of Employment – 1981 (%)



8311 Tool and Die Makers

Below-average employment growth for tool and die makers during the 1970s belied the fact that there were frequent shortages of labour. At present, however, job market conditions for these occupations is better than average, with strong employment growth projected over the next eight years. Of the 9,800 jobs expected to open up by 1995, 1,800 will be new and 8,000 will be replacement openings.

Geographic Distribution of Employment – 1981 (%)

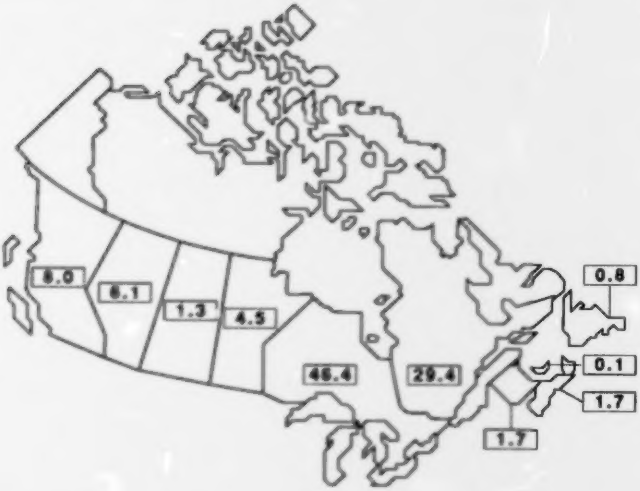


8313 Machinists and Machine Tool Occupations

Typical occupations: aircraft machinists, cam makers, gear finishers, gear shapers, jig borers, lathe machinists, patternmakers, radial-drill-press operators

Employment growth for this group is projected to be roughly equal to the rate expected for the total labour market. An average of 570 new jobs a year plus about 3,000 replacement hirings are expected between 1987 and 1995. There was a decline in the number of women working in these occupations despite encouragement to enter the trade.

Geographic Distribution of Employment – 1981 (%)

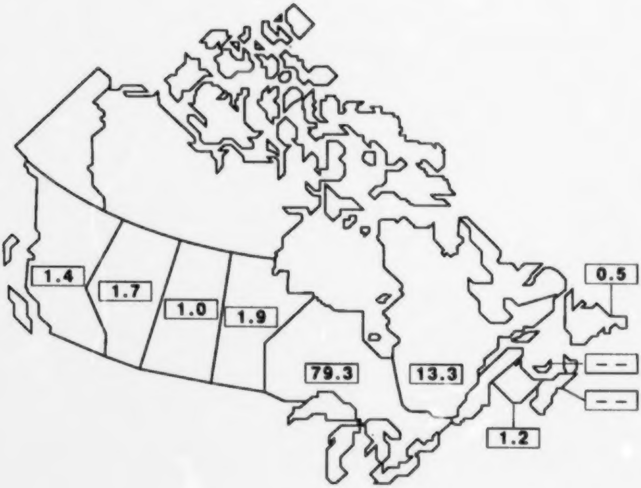


8316 Inspectors and Testers: Metal Machining

Typical occupations: auto parts inspectors, axle inspectors, tool and die inspectors, gear testers, machine shop inspectors

Employment growth in this group during the 1970s was extremely slow, but a faster-than-average rate is projected over the next eight years. However, this is probably optimistic, since technological and organizational changes will likely continue to limit employment growth.

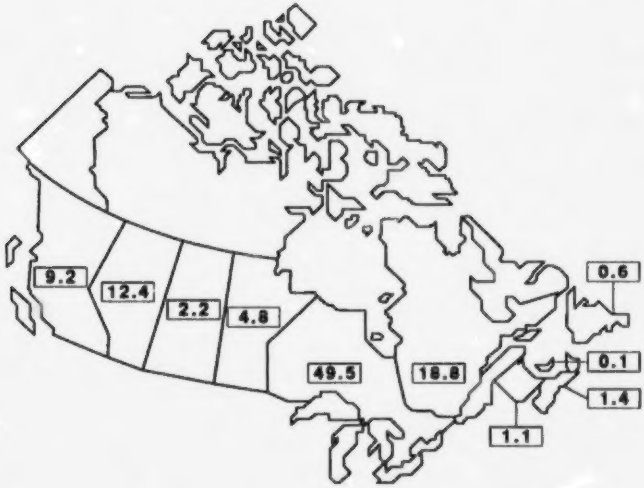
Geographic Distribution of Employment – 1981 (%)



8333 Sheet Metal Workers

Employment of sheet metal workers was reduced by the 1981-1982 recession, but by 1986 there had been some recovery. Between 1987 and 1995, it is expected that employment will continue to rise. In construction, employment on job sites is expected to grow by some 14.4%, a pace faster than the overall average. Taking into consideration replacement demand and job creation, job prospects appear to be good, especially in Ontario and Quebec.

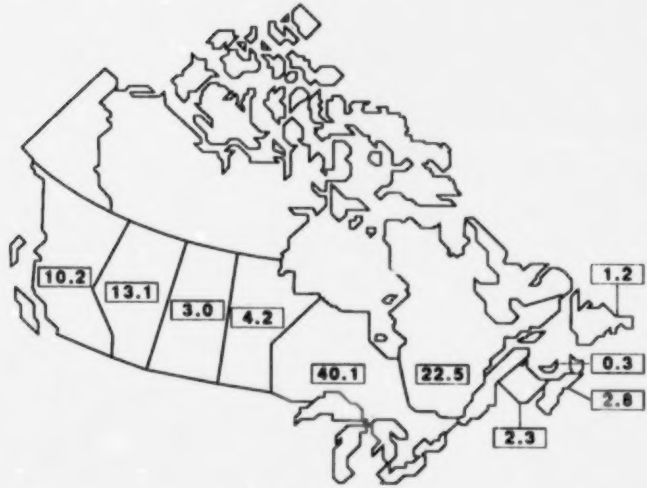
Geographic Distribution of Employment - 1981 (%)



8335 Welders and Flame Cutters

Current market conditions for this group are poorer than the average, with high unemployment, though there may be instances of shortages of specific welding skills. The outlook is for above-average employment growth over the next eight years. Future job prospects for lower skilled workers may be affected by the increased use of robots in manufacturing plants, the use of explosives in high-impact welding and the use of programmable cutting machines. Prospects for highly skilled manual welders are better.

Geographic Distribution of Employment – 1981 (%)

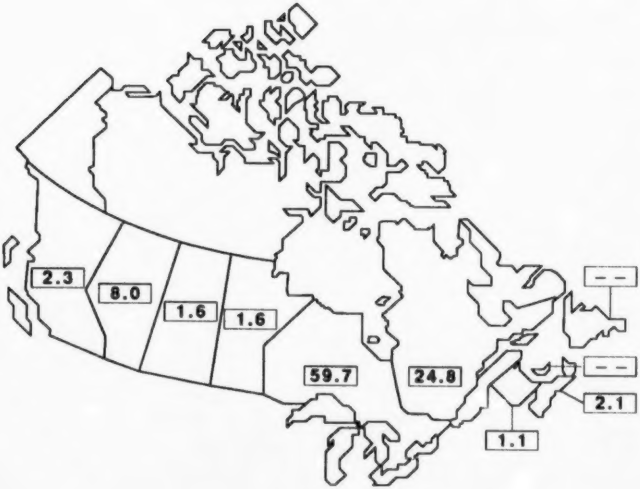


8336 Inspectors and Testers: Metal Shaping and Forming

Typical occupations: boiler testers, can inspectors, welding inspectors, spring testers

Employment growth in this group was above average during the 1970s, but declined during the early 1980s. Although about average growth is projected to 1995, many of the new jobs will, in fact, represent the recovery of previous employment losses. Approximately 1,300 job openings will become available over the next eight years, of which about one quarter will be new.

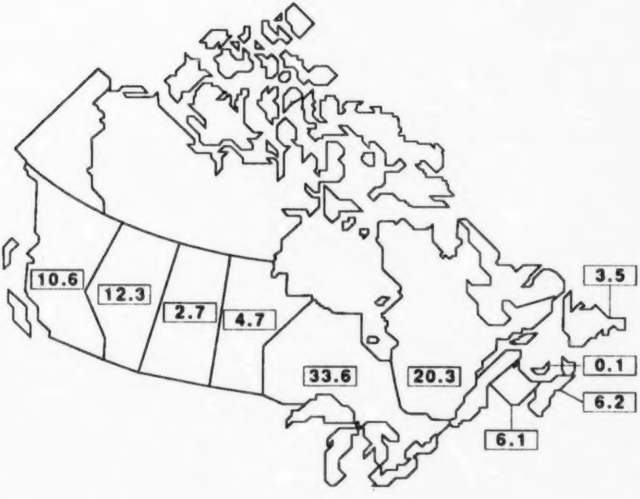
Geographic Distribution of Employment – 1981 (%)



8337 Boilermakers, Platers and Structural Metal Workers

The employment outlook for this occupation calls for above-average growth over the next eight years. Almost 500 new jobs are anticipated, as well as a large number of replacement openings. Women, who represent only a small proportion of the trade, are encouraged to enter the occupation via apprenticeship.

Geographic Distribution of Employment – 1981 (%)

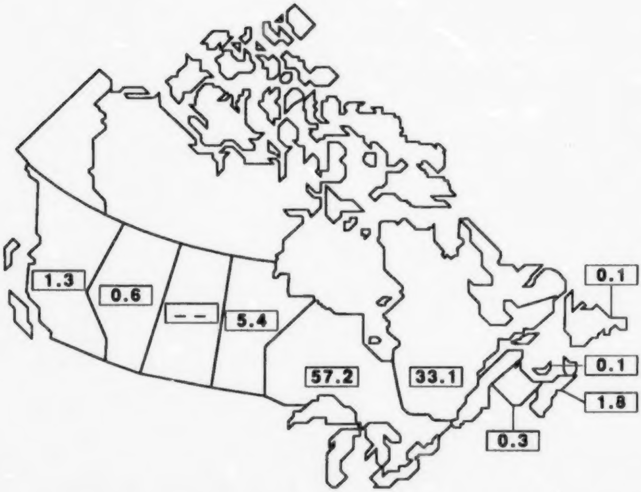


8515 Aircraft Fabricating and Assembling

Typical occupations: aircraft riggers, engine installers, propeller installers, wing assemblers

Employment in the aircraft and parts manufacturing industry is typefied by boom-and-bust cycles. However, the short-term employment outlook for this group is optimistic, with a growth of 20% projected over the next eight years, for a total of 1,200 new jobs. Retirements are expected to create 3,000 additional vacancies. Labour market conditions have improved in the last couple of years and unemployment has fallen.

Geographic Distribution of Employment – 1981 (%)

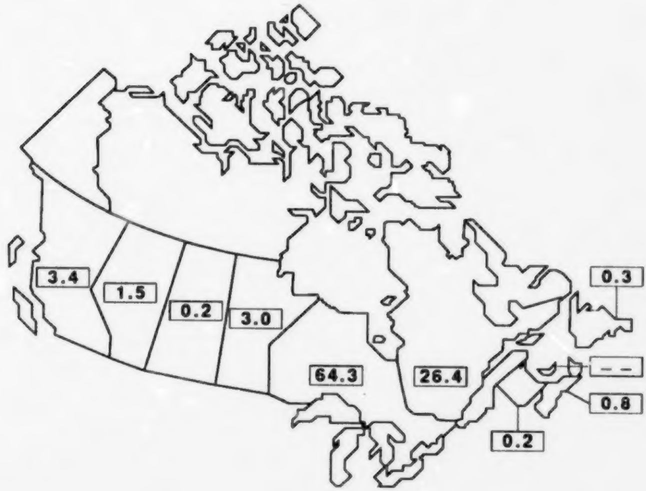


8526 Inspectors and Testers: Fabricating and Assembling Metal Products

Typical occupations: agricultural-equipment inspector, automobile inspector, aircraft tester, business-machine tester, cable tester

Employment for this group should grow at a vigorous rate of 22% by 1995. Resulting job openings should total about 8,400. A substantial number of these will be to replace departing personnel, as a high proportion of the work force is in the 54-plus age group. This group is currently facing good labour market conditions, but jobs might be affected by the trend toward the incorporation of inspection and testing into other duties of assemblers and fabricators.

Geographic Distribution of Employment – 1981 (%)

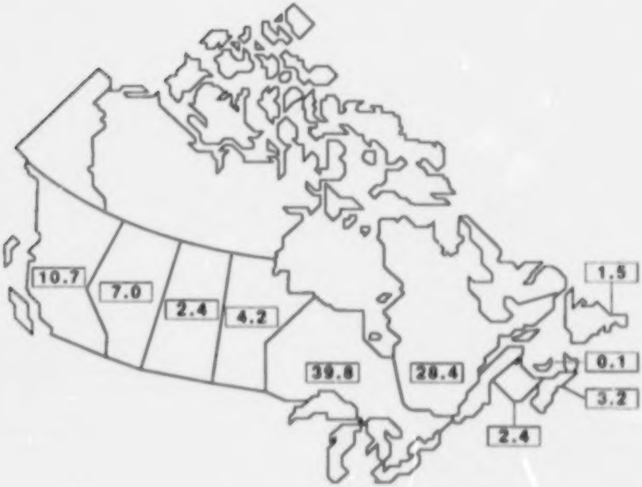


8533 Electrical Installers and Repairers

Typical occupations: air-conditioning repairers, aircraft electricians, automobile electricians, major appliance repairers

Job prospects for electrical equipment repairers are favourable in the short term, but after 1990, employment growth will slow to a more modest pace. There should be about 19,400 job openings, of which an average number will be replacement opportunities.

Geographic Distribution of Employment – 1981 (%)

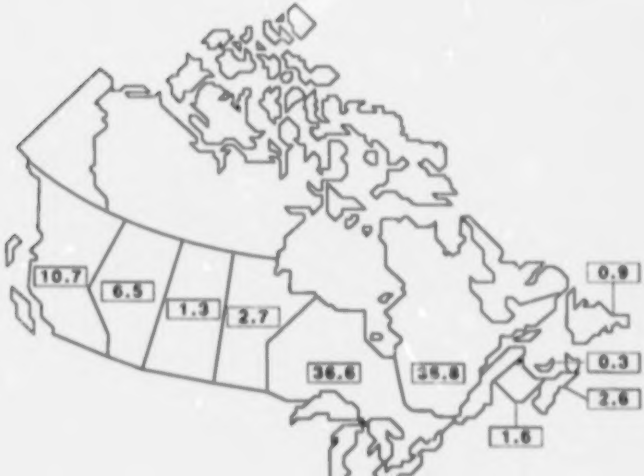


8535 Electronic Installers and Repairers

Typical occupations: electronic instrument technicians, radio repairers, radar repairers, communication technicians

Labour market conditions for electronic repairers are currently favourable, but future employment prospects are projected to be modest. There should be some short-term employment growth in the telecommunications and electrical products manufacturing industries to 1990, after which these sectors are expected to expand at a slower pace. Current employment projections indicate future growth will remain below the overall occupational average. Over the next eight years, approximately 4,300 jobs will become available.

Geographic Distribution of Employment – 1981 (%)

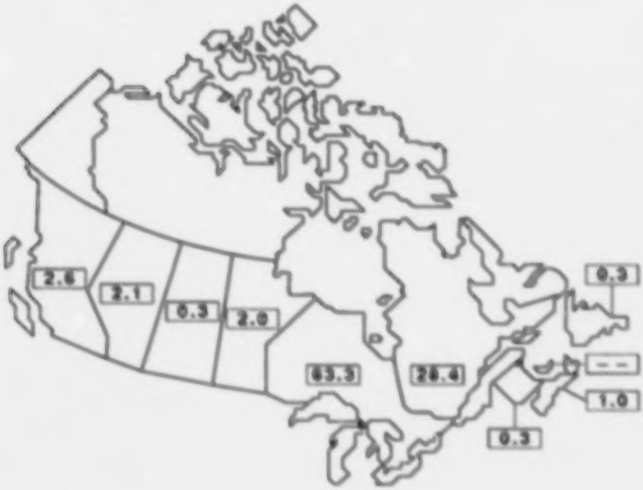


8536 Inspectors and Testers: Electrical and Electronic Equipment

Typical occupations: battery inspectors, electrical testers, household-appliance inspectors, transmitter testers

Employment growth was strong throughout the 1970s and continued on an upward path during the 1980s. Current projections suggest employment will increase 6% by 1995. During this time, approximately 4,000 job openings will become available, mostly to replace departing personnel. In comparison with others, workers in this occupation fared well in the labour market throughout the 1982 recession right through to the present, with below-average unemployment.

Geographic Distribution of Employment – 1981 (%)

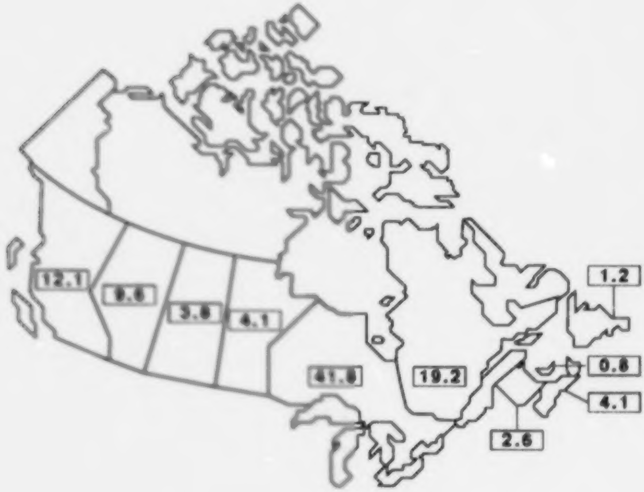


8537 Radio and Television Repairers

Typical occupations: sound-equipment servicers, radio electricians, television technicians

Current projections indicate employment growth will be 8.3% by 1995 which is less than the overall employment growth rate. Approximately 900 new jobs will become available with additional replacement requirements created by the above-average proportion of workers in the 54-plus age category. Based on the outlook for the retail trade industry, job prospects in this occupation look good.

Geographic Distribution of Employment – 1981 (%)

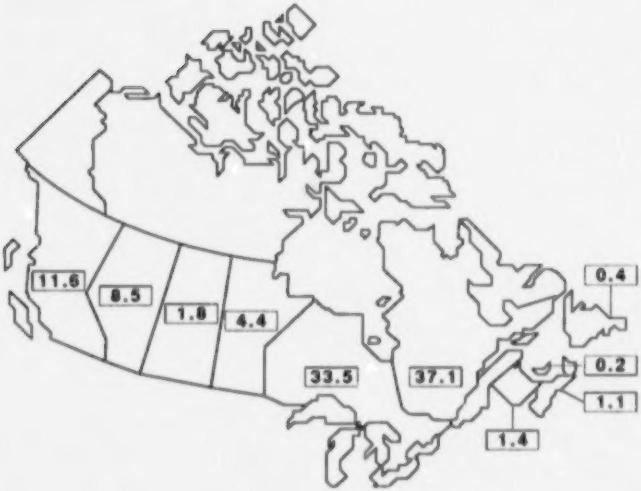


8541 Cabinet and Wood Furniture Makers

Typical occupations: assemblers, bench carpenters, cabinet makers

During the next eight years, employment for this group is expected to grow at an average rate, with about 11,200 job openings, the majority of which will be replacement as the rate of new job creation is expected to be modest in this field. Through the 1980s thus far, cabinet makers have faced poor labour market conditions. Despite improvements in recent years, unemployment remains quite high.

Geographic Distribution of Employment – 1981 (%)

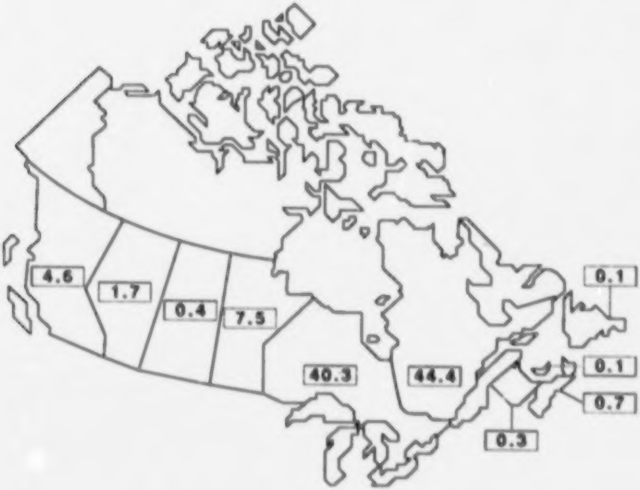


8551 Pattern Makers and Cutters: Textile, Fur and Leather

Typical occupations: designers, patternmakers, pattern markers, cutters, and punchers

Current projections indicate employment will expand by 8% by 1995. Of the 7,100 jobs expected to become available, most will be replacement openings, as an above-average proportion of patternmakers are in the 54-plus age group. Labour market conditions in the 1980s have been poorer than average, and unemployment has been quite high since 1982. The situation is worse than in many other occupations, mainly because the clothing and textile industry has been losing its market share to foreign suppliers.

Geographic Distribution of Employment – 1981 (%)

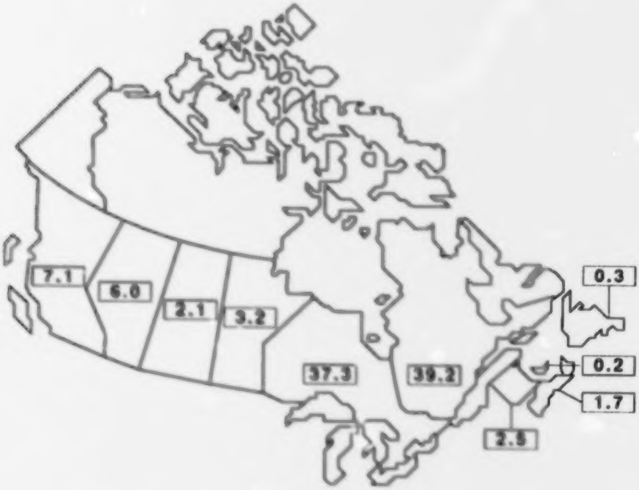


8553 Tailors and Dressmakers

Typical occupations: alterers, custom tailors, foundation garment fitters

Employment growth will probably be less than average in the next eight years. Approximately 1,100 jobs should become available, most of which will be replacement openings since a high proportion of tailors and dressmakers are in the 54-plus age group. Most job opportunities will be in the retail trade, as favourable interest rates are expected to sustain consumer spending.

Geographic Distribution of Employment – 1981 (%)

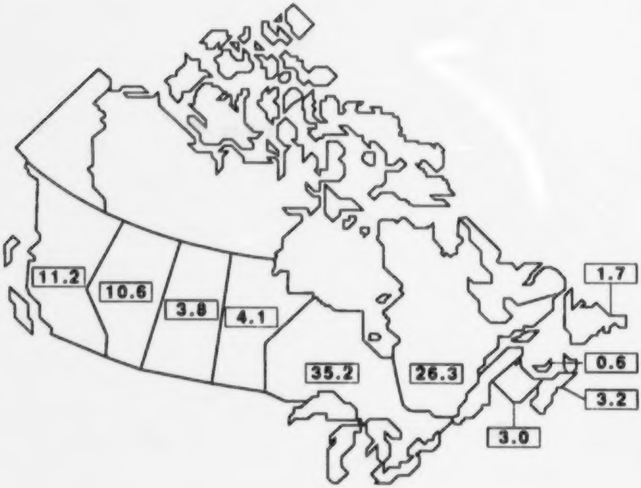


8581 Motor Vehicle Mechanics and Repairers

Typical occupations: motor vehicle mechanics, truck-trailer repairers, snowmobile repairers, mechanical unit repairers, engine repairers

Although employment growth in this occupation was above average during the first half of the 1980s, average growth up until 1995 is projected. Approximately 77,900 jobs will become available in the next eight years. Job openings resulting from workers leaving will be below average because of the low proportion of mechanics in the 54-plus age group. Short-term employment prospects in retail trade are fair, and the demand for skilled mechanics continues to grow.

Geographic Distribution of Employment – 1981 (%)

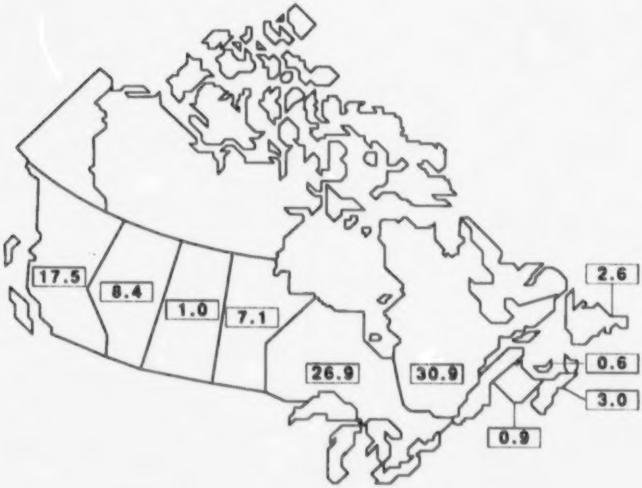


8582 Aircraft Mechanics and Repairers

Typical occupations: aircraft-engine experts, carburetor mechanics, helicopter mechanics, jet repairers

Employment growth for this group is projected at 5%, which is below that expected throughout the economy. A total of 5,000 job openings will become available in the next eight years, with replacement openings outnumbering new jobs. Labour market conditions for aircraft mechanics improved in 1986 but they are still not as favourable as they were before the 1981-1982 recession.

Geographic Distribution of Employment – 1981 (%)

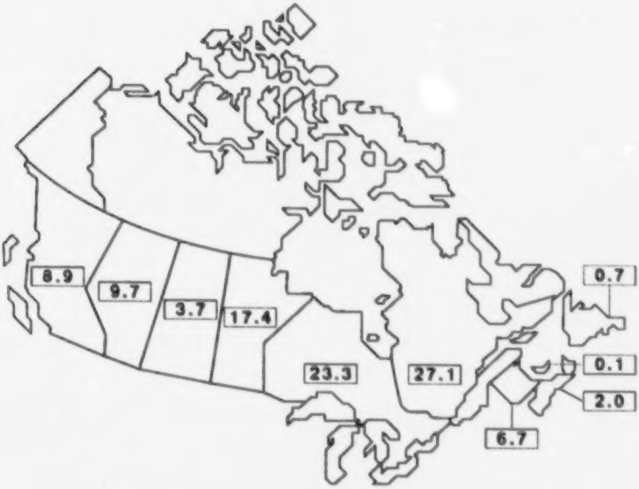


8583 Rail Transport Equipment Mechanics and Repairers

Typical occupations: brake mechanics, compressor repairers, switch repairers

Employment will grow by not quite 6% over the next eight years, a rate well below the national average, suggesting that short-term job prospects for rail mechanics are poor. Since an above-average proportion of the work force is over 54, retirements and deaths should create the majority of job openings.

Geographic Distribution of Employment - 1981 (%)

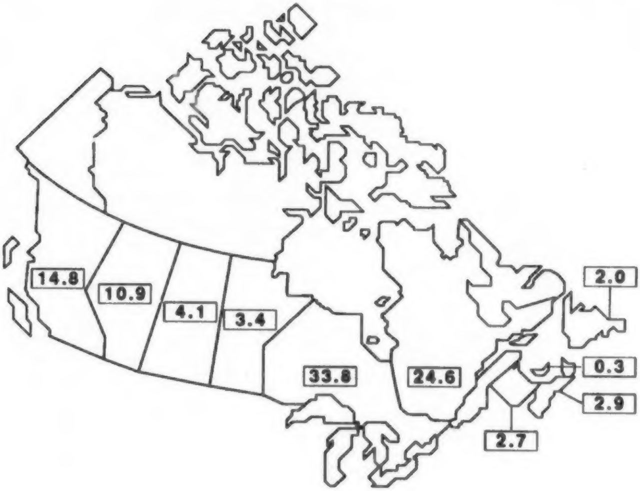


8584 Industrial, Farm and Construction Machinery Mechanics and Repairers

Typical occupations: construction equipment repairers, farm-machinery repairers, sewing machine fixers, diesel mechanics

Employment is expected to grow at an average rate in the next eight years with about 49,500 jobs becoming available. Most of these vacancies will be replacement openings, as new job creation is expected to be moderate. In 1986, labour market conditions for industrial mechanics were about average, and current rates of unemployment are on a par with the labour force at large.

Geographic Distribution of Employment – 1981 (%)

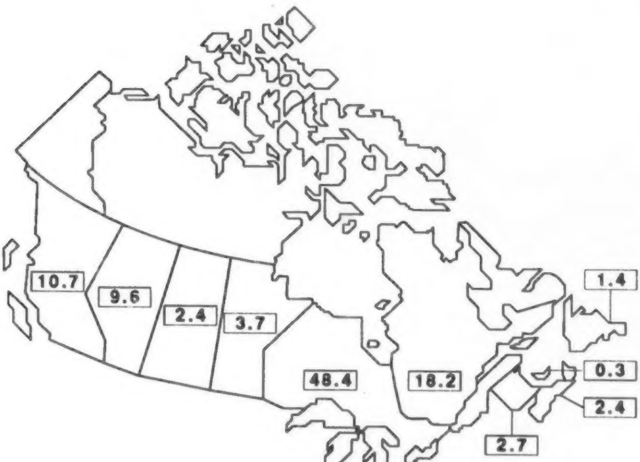


8585 Business Machine Mechanics and Repairers

Typical occupations: adding machine servicers, photocopy machine servicers, typewriter mechanics

Short-term job opportunities for this group are moderate with about a 10% increase in growth over the next eight years. Nearly 5,600 jobs will become available, of which most will be replacement openings. Business machine mechanics fared well in the labour market throughout the 1980s, despite slow employment growth. And their unemployment rates have been consistently lower than for the labour force at large.

Geographic Distribution of Employment – 1981 (%)

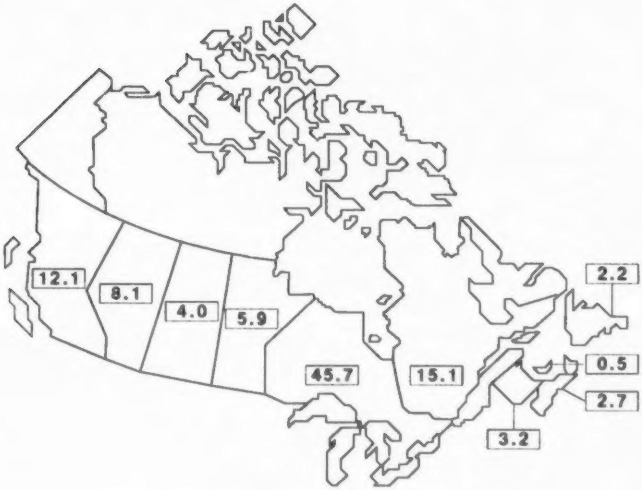


8587 Watch and Clock Repairers

Typical occupations: speedometer repairers, meter mechanics, watchmakers

Employment for this group should grow at an average pace in the next eight years. Most job opportunities will be replacement openings left by the above-average proportion of workers now in the 54-plus age group. Labour market conditions have improved for this occupation, as indicated by its lower-than-average rates of unemployment. Long-term prospects, however, may be moderately affected by the trend to replace rather than repair cheaper, electronically driven timepieces.

Geographic Distribution of Employment – 1981 (%)

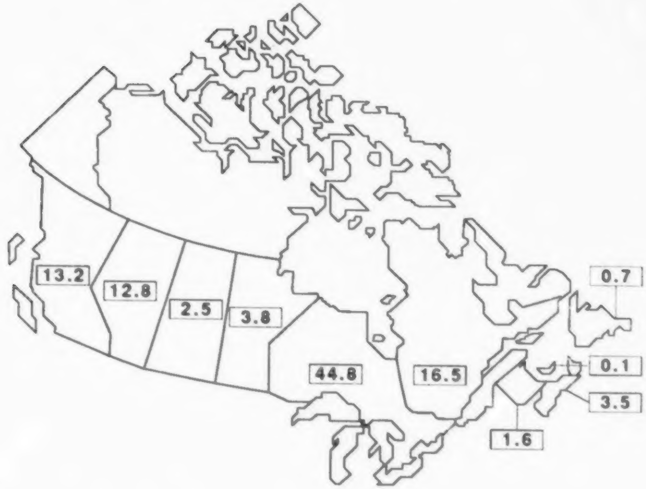


8588 Precision Instrument Mechanics and Repairers

Typical occupations: camera repairers, gyroscopic-instrument mechanics, surgical-instrument repairers

Future job prospects in this area are good: about 2,100 jobs will become available in the next eight years, of which most will be replacement openings. Labour market conditions have improved in recent years, and current unemployment rates are about average.

Geographic Distribution of Employment - 1981 (%)

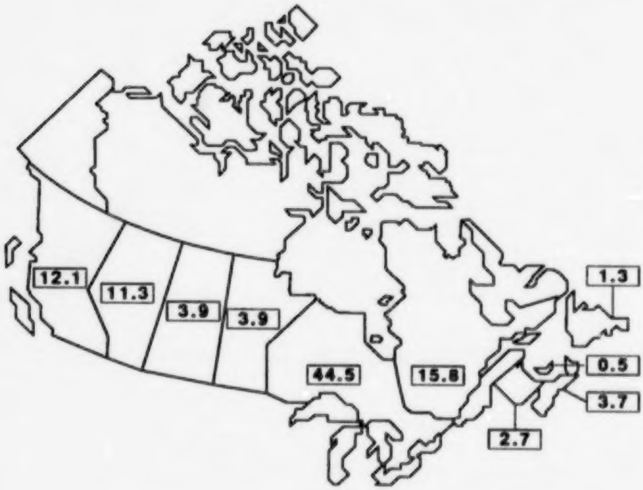


8589 Other Mechanics and Repairers

Typical occupations: crane greasers, gas servicers, car oilers, tire changers, oilers, locksmiths

Job prospects for this group should improve owing to an average rate of employment growth over the next eight years. Some 12,700 jobs are anticipated, many of which will be replacements for the above-average proportion of employees in the 54-plus age category. At present, this occupation is facing labour market conditions only slightly better than the overall average.

Geographic Distribution of Employment – 1981 (%)

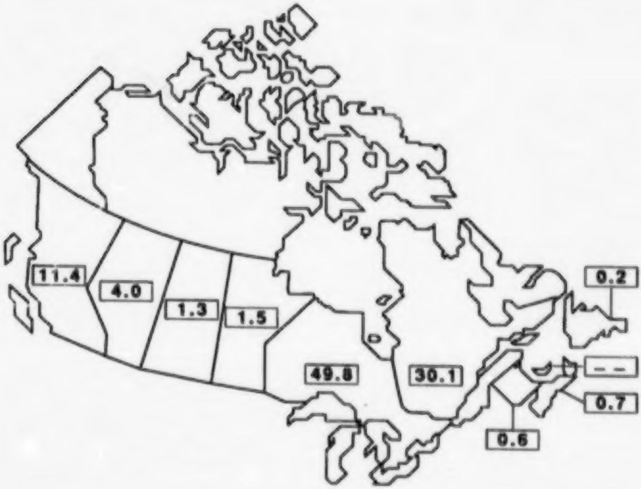


8591 Jewellers and Silversmiths

Typical occupations: diamond cutters, embossers, gemologists, silversmiths

There should be modest employment growth, somewhat lower than the national average, for this group. In the next eight years, approximately 2,500 job openings are anticipated, most of which will be replacement. Labour market conditions have improved in recent years, with 1986 unemployment rates on a par with the average for all occupations. Most jewellers are men but the number of women is increasing.

Geographic Distribution of Employment – 1981 (%)

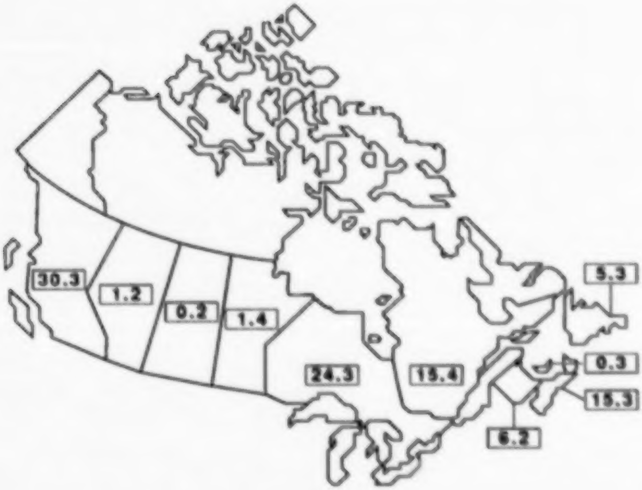


8592 Marine Craft Fabricating, Assembling and Repairing

Typical occupations: boat carpenters, marine machinists, ship joiners, steel fitters, shipwrights

The employment outlook for this group appears favourable, with a projected growth increase of 20% by 1995. A total of 6,200 job openings are anticipated, of which 4,200 will be replacement openings, as an above-average share of the work force is in the 54-plus age group. Despite these projections, a current oversupply has made unemployment rates in this grouping higher than average.

Geographic Distribution of Employment – 1981 (%)

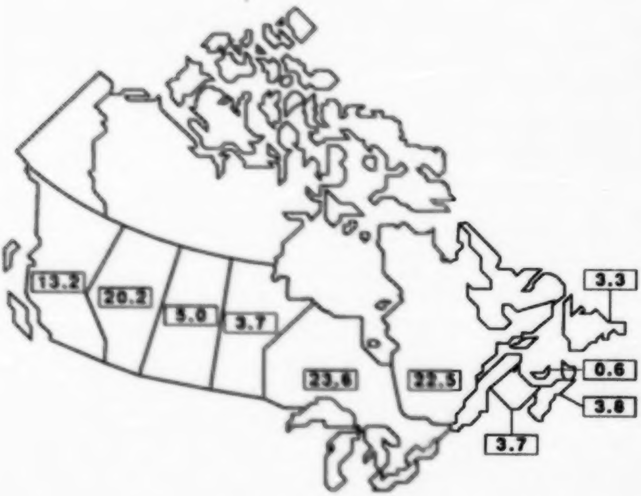


8711 Excavators and Graders

Typical occupations: operators of horizontal earth-boring machines, bulldozers, power shovels and dredging machines

The long-term outlook for this group depends especially on the outlook for major energy-related projects and the volume of road, highway and bridge construction. The proposed cross-Canada improvement program for city roads and sewers during 1987 to 1995 should provide more jobs. Since about 85% of this group work in construction or mining (industries susceptible to boom-and-bust cycles,) employees in these occupations can expect some periods of unemployment.

Geographic Distribution of Employment – 1981 (%)

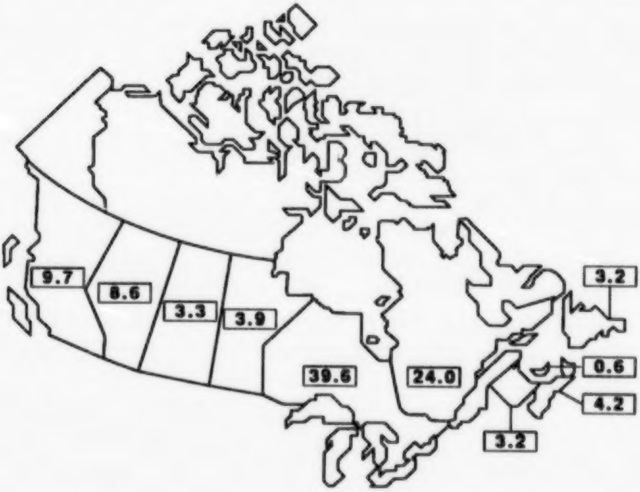


8731 Electrical Power Line Workers

Typical occupations: linemen, service linemen, repair linemen, cablemen

Average employment growth is projected for the period from 1987 to 1995 because of a number of anticipated electricity generation projects and increased power exports to the U.S. Most line workers are men, but women are being encouraged to enter the trade and now represent a small but growing proportion of this labour force.

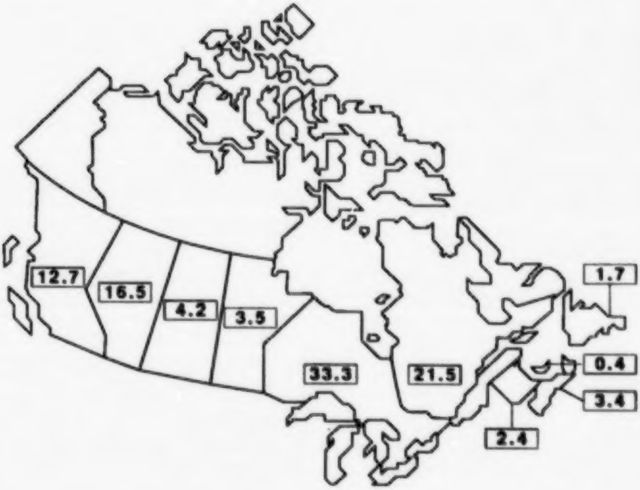
Geographic Distribution of Employment – 1981 (%)



8733 Construction Electricians and Repairers

Between 1987 and 1995, employment for electricians should grow: in new construction, as opposed to maintenance work, the demand for electricians is expected to expand by 22%. A recent development that may increase employment is the "smart" building, which has a central computer monitoring and controlling heating, air conditioning, ventilation, elevators, lighting and so forth. Electricians are needed to install much of the necessary equipment and wiring.

Geographic Distribution of Employment – 1981 (%)

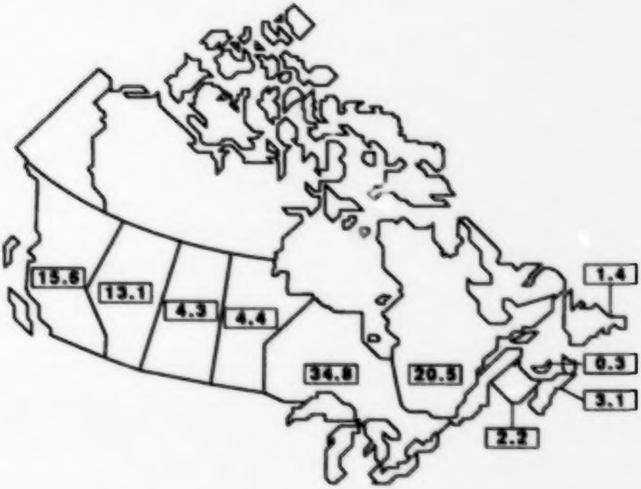


8735 Wire Communications Equipment Installers and Repairers

Typical occupations: telephone technicians, wire installers, burglar-alarm installers, switchboard repairers

The rapid employment growth enjoyed by this group in the 1970s ended in 1984, and is expected to be slower than average over the next eight years. Most job opportunities will be replacement openings. Since technology is changing rapidly in this field, technicians in this group will be subject to continuous retraining.

Geographic Distribution of Employment – 1981 (%)

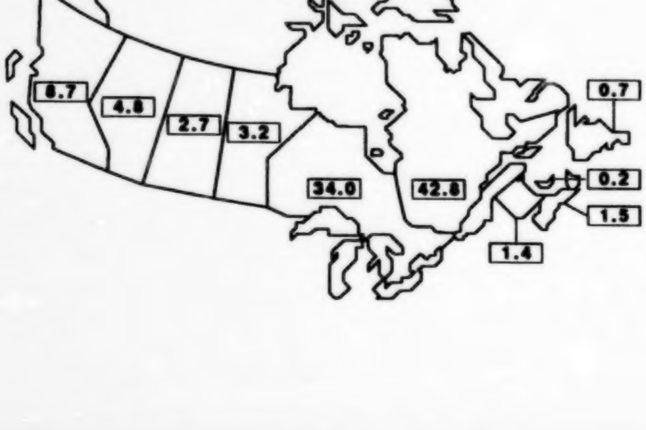


8736 Inspectors and Testers: Electrical Power, Lighting and Wire Communications Equipment

Typical occupations: cable testers, electrical inspectors, relay testers, testboard analysers

Employment growth over the next eight years will be below average, partly because the improved technology of more sophisticated self-diagnostic systems requires fewer inspectors. There will be relatively few replacement openings because of the age structure of this group. However, increasing electrical applications may spur demand to somewhat higher levels than projected here.

Geographic Distribution of Employment – 1981 (%)

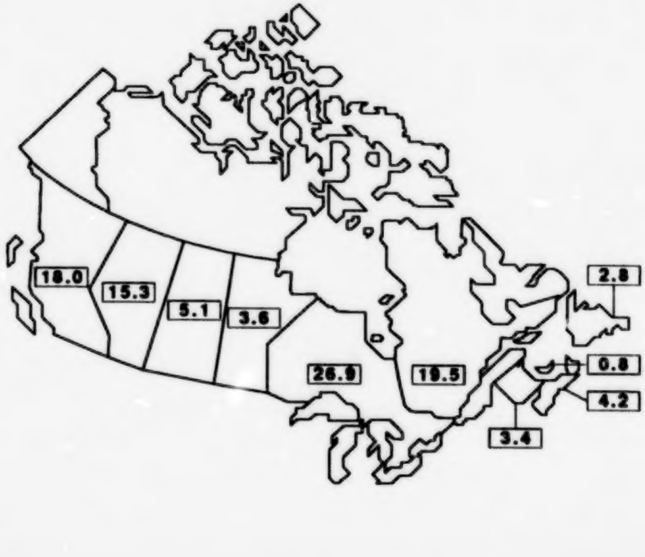


8781 Carpenters

Typical occupations: joiners, framers, form builders, maintenance carpenters, finishing carpenters

Employment for carpenters fell during the early 1980s as a result of the recession, although by 1986, previous employment losses had been recovered. Employment growth is expected to continue through to 1995. Employment created by new construction activity is expected to grow by 7.2% between 1987 and 1995, plus jobs created by departing workers. Most openings created by construction growth will be in central Canada.

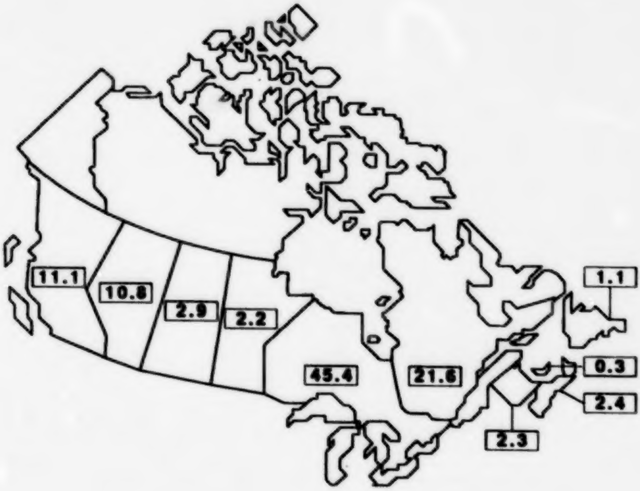
Geographic Distribution of Employment – 1981 (%)



8782 Brick and Stone Masons and Tile Setters

Employment for masons grew somewhat more slowly between 1971 and 1981 than in other occupations. The demand for masons is expected to increase over the 1987 to 1995 period, but at a rate slower than the overall average. Masons who work on construction projects may be frequently laid off between projects, a pattern more pronounced during economic slowdowns.

Geographic Distribution of Employment - 1981 (%)

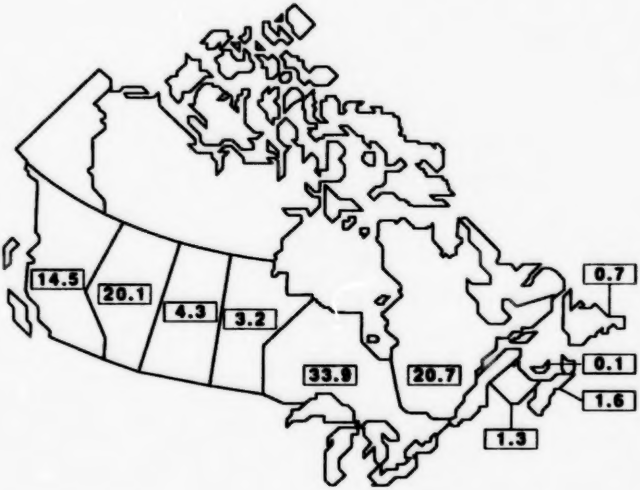


8783 Concrete Finishers

Typical occupations: cement masons, cement-gun nozzle operators, concrete smoothers, terrazzo workers

Employment growth in this occupation should be faster than the average over the next eight years. Age structure and worker movement out of the occupation indicate that there will be replacement jobs coming open. The recent trend towards greater use of concrete in commercial construction should improve job prospects, but the boom-or-bust nature of the construction industry does create periods of unemployment.

Geographic Distribution of Employment – 1981 (%)

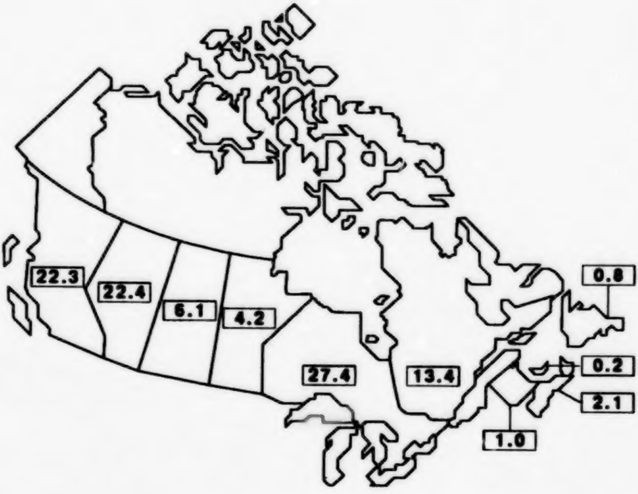


8784 Plasterers

Typical occupations: plasterers, lathers, drywall installers, tapers

Faster-than-average employment growth for this group is expected over the 1987 to 1995 period. In addition, some positions will come open to replace departing workers. Since drywall has almost replaced plaster as a finishing material, there will be more jobs for workers skilled in drywall installation and taping.

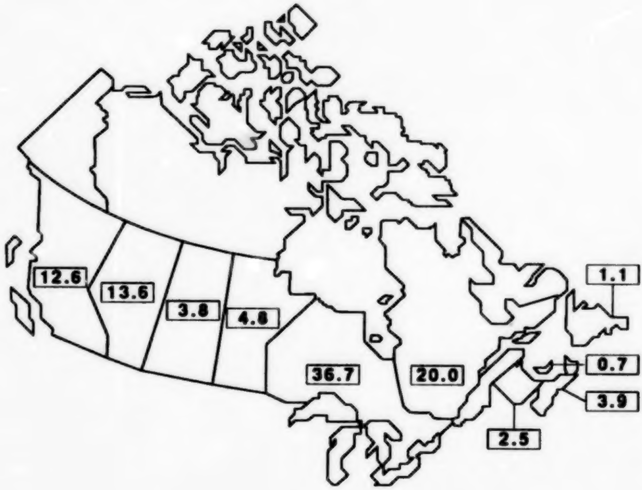
Geographic Distribution of Employment – 1981 (%)



8785 Painters and Paperhangers

Employment among painters fell during the recession of the early 1980s, but was approaching the 1981 level again by 1986. It should continue to grow until 1995. Replacement openings resulting from departing workers should provide further jobs. The painting trade is affected by overall economic activity, particularly construction activity which means job availability fluctuates considerably.

Geographic Distribution of Employment – 1981 (%)

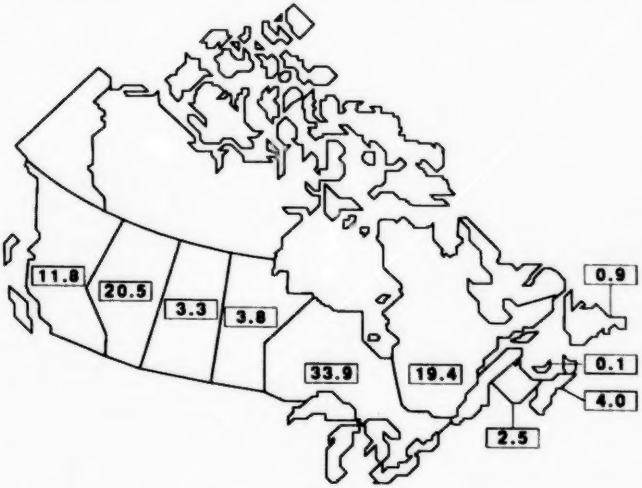


8786 Insulation Installers

Typical occupations: air-conditioning equipment insulators, insulation blowers, construction insulators, pipe coverers

High insulating standards for new buildings should encourage employment growth, which is projected to be above average for this group over the next eight years. Growth will be concentrated in Quebec and Ontario. Despite this relatively optimistic outlook, this occupation suffers from both seasonal and business cycle swings, which can lead to high levels of unemployment.

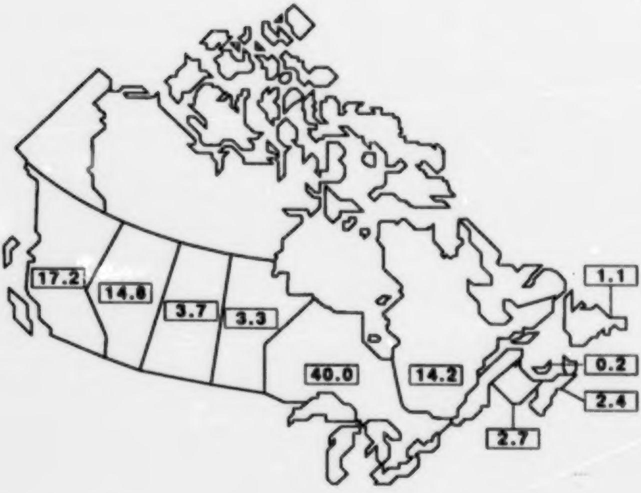
Geographic Distribution of Employment – 1981 (%)



8787 Roofers and Waterproofers

The medium-term employment outlook for this group is for minimal new job growth and higher-than-average attrition rates. Since roofing work is highly seasonal, roofers can expect periods of unemployment even in the summer. On the other hand, when the weather is good and building activity is high, they may put in considerable overtime.

Geographic Distribution of Employment – 1981 (%)

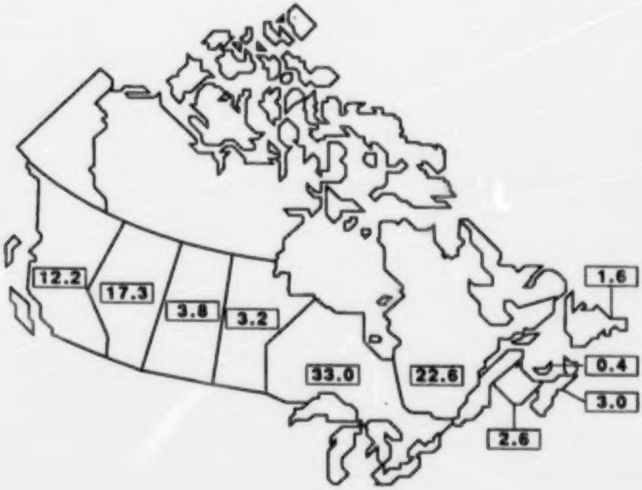


8791 Pipefitters and Plumbers

Typical occupations: plumbers, pipefitters, steamfitters, gasfitters, sprinklerfitters

Employment in the piping trades is expected to grow significantly over the 1987 to 1995 period with considerably increased demand for piping tradespeople in construction. Future replacement openings should contribute further to the number of available jobs. Piping trades jobs are subject to some seasonal variation and periods of unemployment caused by economic downturns.

Geographic Distribution of Employment - 1981 (%)

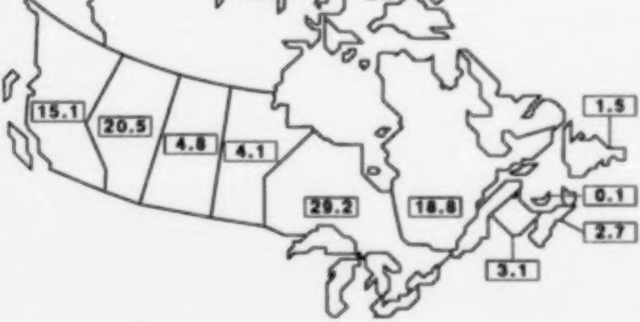


8793 Structural Metal Erectors

Typical occupations: structural ironworkers, reinforcing ironworkers

Jobs for ironworkers decreased during the economic slowdown of the early 1980s; however, by 1986, employment was returning to pre-recession levels. Further improvement is expected over the 1987 to 1995 period. This, coupled with the anticipated number of retirements, should provide job opportunities for prospective ironworkers.

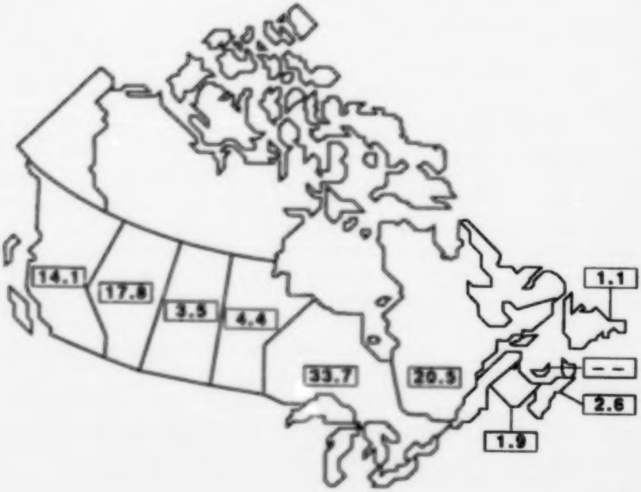
Geographic Distribution of Employment – 1981 (%)



8795 Glaziers

The medium- to long-term employment prospects for this occupation are about average. The age structure suggests that since glaziers tend to stay in the trade until retirement, there will be few replacement job openings occuring in the next eight years. Since glaziers' jobs are very sensitive to changes in economic conditions, they can expect periods of unemployment during economic downturns.

Geographic Distribution of Employment – 1981 (%)

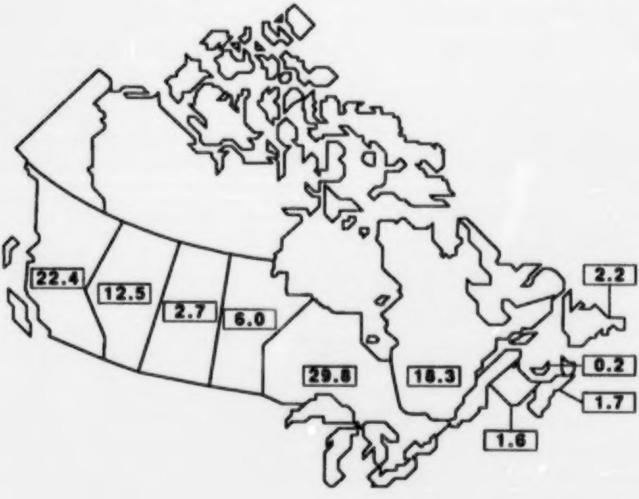


9111 Air Pilots, Navigators and Flight Engineers

Typical occupations: pilots-in-command, navigators, flight engineers, helicopter pilots

Employment growth for this group is expected to be marginal up until 1995, based on anticipated slow growth in the air transport industry. Nearly all job openings will be vacancies left by departing personnel. Labour market conditions for pilots have been poor over the last few years, as indicated by a doubling in unemployment between 1981 and 1985.

Geographic Distribution of Employment – 1981 (%)

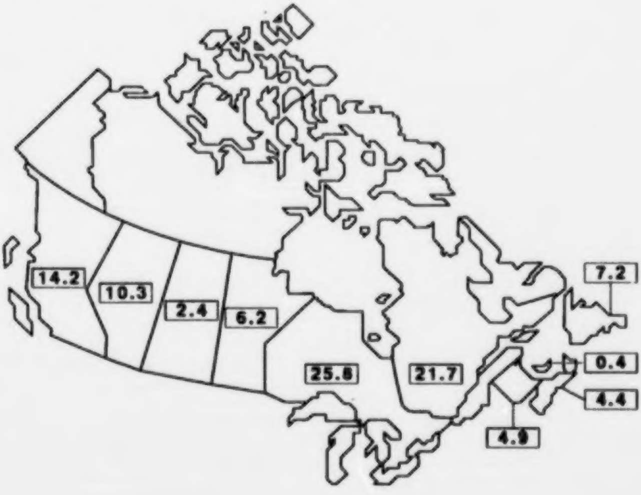


9113 Air Transport Operating Support

Typical occupations: air traffic controllers, flight dispatchers, crew schedulers, airline radio operators

Employment growth in these occupations will probably be much slower than the overall average over the next eight years; 1,700 jobs will become vacant because of departing personnel. Despite the relatively slow employment growth rates, labour market conditions are generally good with unemployment lower than in the general labour market.

Geographic Distribution of Employment – 1981 (%)

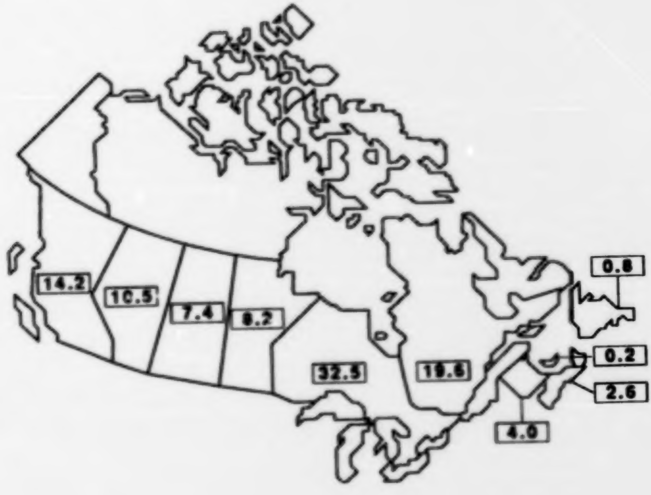


9131 Locomotive Operating Occupations

Typical occupations: locomotive engineers, yard engineers, road freight engineers, switch engineers, motor operators

Since government restraint, high costs and technological advances are contributing to unemployment in both passenger and freight transport, job prospects will be below the average for all occupations. Replacement job openings will account for most upcoming job opportunities. Employment in the rail transportation industry is very sensitive to fluctuations in the overall business climate.

Geographic Distribution of Employment – 1981 (%)

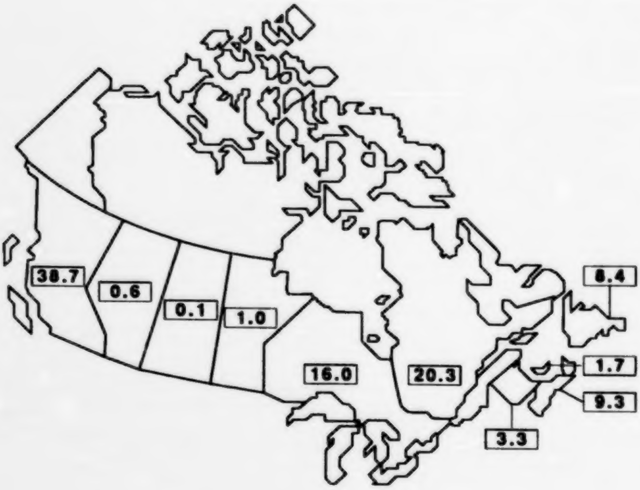


9151 Deck Officers

Typical occupations: ship masters, mates, pilots, navigators

Employment growth for this group is expected to be about the occupational average. Most of the 3,700 new jobs anticipated over the next eight years will be created by departing personnel. Labour market conditions improved in 1986 over the preceding few years, but they are still below average, with a fairly high unemployment rate.

Geographic Distribution of Employment – 1981 (%)

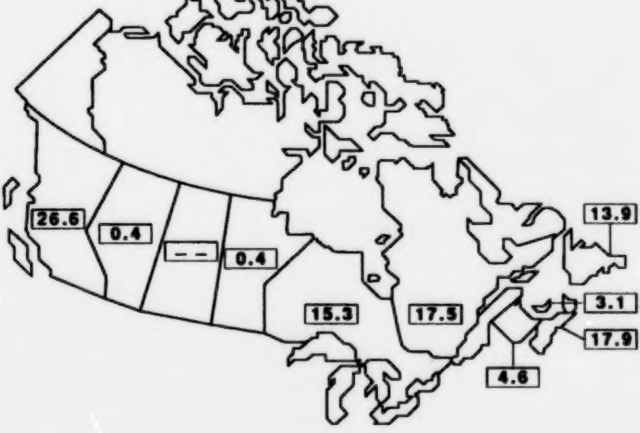


9153 Ship Engineering Officers

Typical occupations: engineering assistants, engineering mechanics, marine-engineer officers

The projected employment growth rate for this group should be about equal to other occupations. Replacement jobs over the next eight years is expected to be slightly above the average for all occupations. Labour market conditions improved slightly in 1986 over the preceding few years, but they are still below the average, with fairly high unemployment rates.

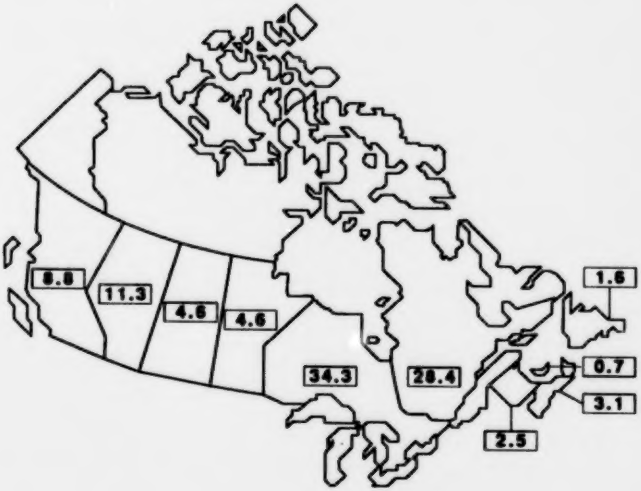
Geographic Distribution of Employment – 1981 (%)



9171 Bus Drivers

Over the next eight years there is expected to be less than average employment growth for bus drivers. Replacement jobs are expected to be slightly below average, even though they will still account for the majority of total job openings, about 27,500. Seasonal variation in employment exists, especially among school bus drivers, and part-time work is slightly more common than in other occupations.

Geographic Distribution of Employment – 1981 (%)

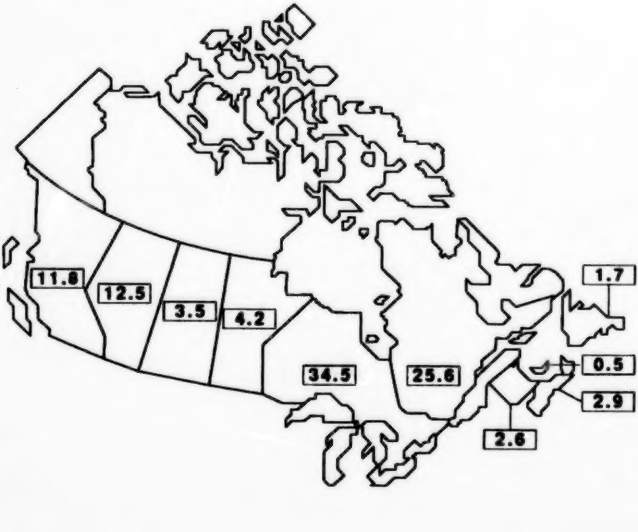


9175 Truck Drivers

Typical occupations: city delivery drivers, dump truck drivers, tow truck drivers, moving van drivers, long-haul drivers

Employment growth for this occupation should be about average over the next eight years, with 129,000 additional workers needed to fill new jobs and to replace departing personnel. Most drivers are men, although the number of woman drivers is growing. Labour market conditions have not changed much over the last several years. Despite reasonable employment growth rates, an over-supply of truck drivers has led to some unemployment.

Geographic Distribution of Employment – 1981 (%)

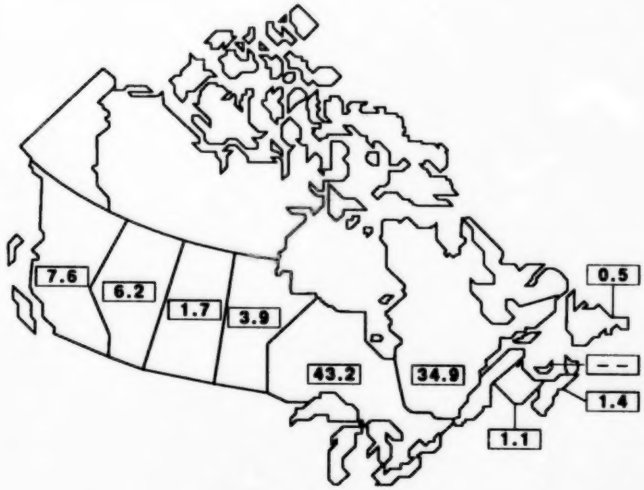


9512 Printing Press Operators

Typical occupations: commercial press operators, flexographic press operators, newspaper press operators

Employment growth for these occupations will probably be below average into the mid-1990s. Approximately 6,600 press operators will be needed to fill new jobs and to replace departing personnel in certain areas. In others, where traditional printing processes are being phased out, there will be few job prospects. Labour market conditions for press operators improved in 1986 and should continue to improve.

Geographic Distribution of Employment – 1981 (%)

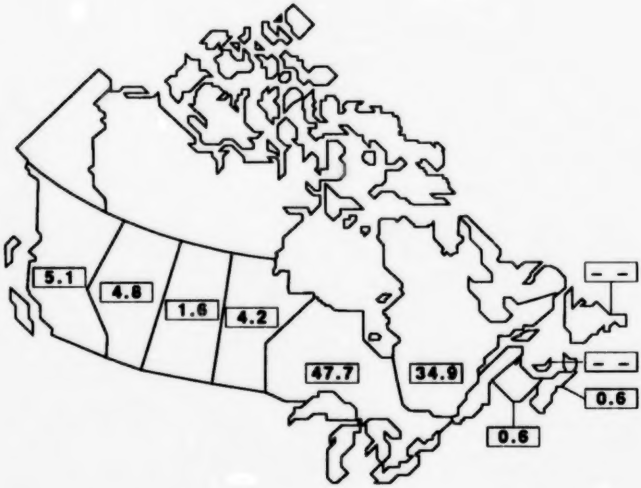


9515 Photoengravers

Typical occupations: colour finishers, engravers, etchers, pantographers, scanner operators

Employment growth for this occupation will probably be average over the next eight years, with about 1,000 new jobs, mostly the result of vacancies left by departing personnel. In the last few years, the unemployment rate has been above average, with a slight drop in 1986. Technological advances have made retraining necessary at certain stages of the photoengraving process: laser technology will create jobs for photoengravers trained in its application, and moderate employment growth is expected for electronic pre-press technicians.

Geographic Distribution of Employment – 1981 (%)

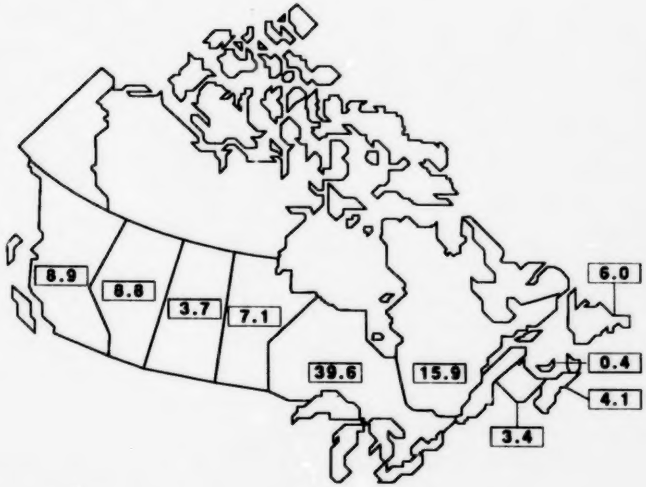


9531 Power Station Operators

Typical occupations: generating station operators, hydro-station operators, nuclear-reactor operators, power-plant engineers, turbine engineers

Rapid employment growth in the 1970s has slowed in the 1980s to a below-average rate. Employment should increase at about 8.6% over the next eight years, with approximately 3,700 job openings, the majority of which will be replacement jobs. In 1986, labour market conditions were better than in most other occupations, as indicated by low levels of unemployment in this area.

Geographic Distribution of Employment – 1981 (%)

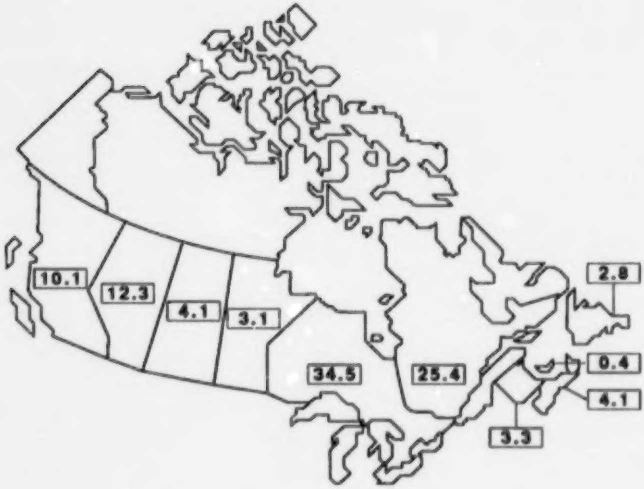


9539 Stationary Engine and Utilities Equipment Operators

Typical occupations: air-conditioning operators, gas-compressor operators, stationary engineers, pipeline gaugers

Employment growth for this group should be in the 8.5% range over the next eight years, resulting in approximately 26,500 job openings. Replacement openings will provide most of those jobs. There has been less unemployment for stationary engineers than in most occupations in the 1980s.

Geographic Distribution of Employment – 1981 (%)

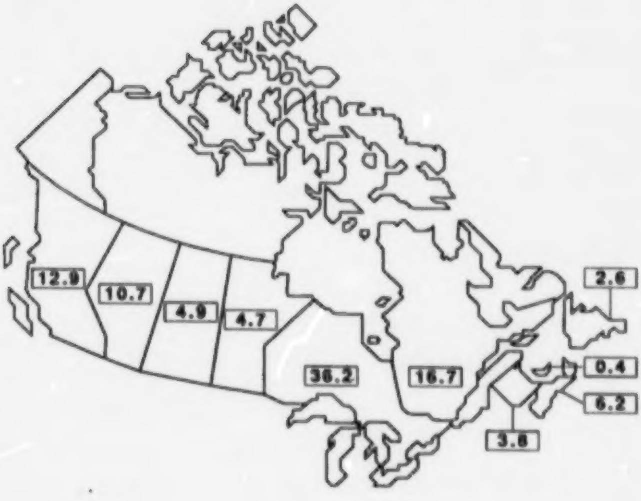


9551 Radio and Television Broadcasting Equipment Operators

Typical occupations: broadcast engineers, radio operators, telecasting technicians, videotape recording (VTR) operators

Employment growth for this group is expected to be average over the next eight years. Approximately 2,700 jobs will become available, most of which will be replacement openings. This occupation is predominately male, although the number of women has increased substantially. Labour market conditions for radio and TV equipment operators were better than average in 1986, with fairly low unemployment.

Geographic Distribution of Employment – 1981 (%)

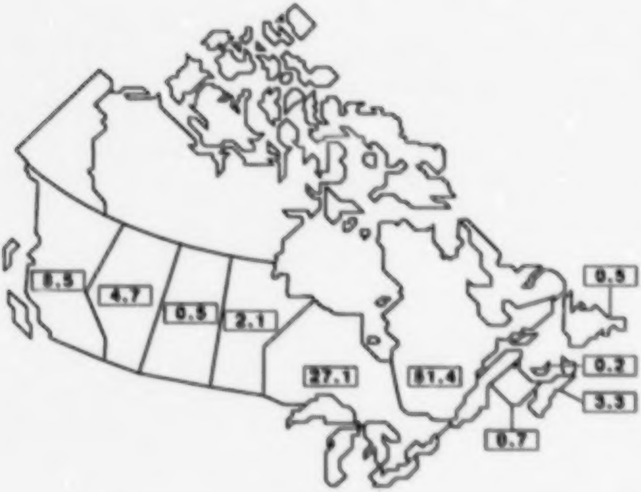


9555 Sound and Video Recording and Reproduction Equipment Operators

Typical occupations: audio engineers, radio recorders, sound editors, studio technicians

Employment for this group should increase at an average pace over the next eight years, a slight slowdown from the last decade. A total of 700 job openings will become available, and replacement requirements will be below average. Automation in the telecommunications industry may have a negative effect on job prospects. However, in 1986, sound and video operators had lower unemployment compared to most other occupations.

Geographic Distribution of Employment – 1981 (%)

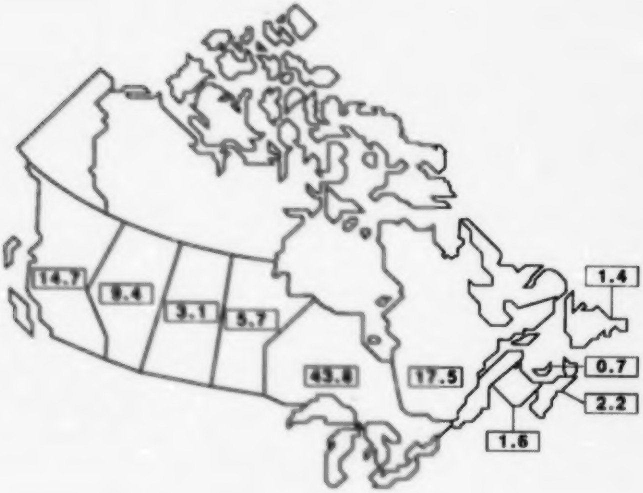


9591 Photographic Processors

Typical occupations: colour photo printers, enlargers, film and photograph developers

Future job opportunities for this group appear to be very favourable. Employment should increase at an above-average rate of 14.3% over the next eight years, with about 1,300 new jobs and 2,800 replacement jobs opening up. This occupational group fared better than most in the labour market in 1986, judging by its low unemployment rates.

Geographic Distribution of Employment – 1981 (%)



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